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### **The Boao Forum for Asia Progress of Asian Economic Integration Annual Report 2009**

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# ACRONYMS

<b>ABAC</b>	APEC Business Advisory Council
<b>ACIA</b>	ASEAN Comprehensive Investment Agreement or Arctic Climate Impact Assessment
<b>ACMECS</b>	Ayeyawady-Chao Phraya-Mekong Economic Cooperation Strategy
<b>ADB</b>	Asian Development Bank
<b>ADB I</b>	Asian Development Bank Institute
<b>ADS</b>	Approved Destination Status Scheme
<b>AEC</b>	ASEAN Economic Community
<b>AFAS</b>	ASEAN Framework Agreement on Services
<b>AFTA</b>	ASEAN Free Trade Area
<b>AIA</b>	ASEAN Investment Area
<b>AIACC</b>	Assessments of Impacts and Adaptations to Climate Change
<b>AICO</b>	ASEAN Industrial Cooperation
<b>AJCEP</b>	ASEAN-Japan Comprehensive Economic Partnership
<b>AMU</b>	Asian Monetary Unit
<b>APC</b>	Asia-Pacific Community
<b>APEC</b>	Asia-Pacific Economic Cooperation: established in 1989 by Australia, Brunei Darussalam, Canada, Indonesia, Japan, Korea, Malaysia, New Zealand, the Philippines, Singapore, Thailand, and the United States. China, Hong Kong, China, Taipei, China (joined in 1991), Mexico, Papua New Guinea (1993), Chile (1994), Peru, Russia, and Viet Nam (1998) later became new members.
<b>APF</b>	Asset Purchase Facility
<b>APT</b>	ASEAN Plus Three. (See ASEAN + 3.)
<b>APTA</b>	Asia-Pacific Trade Agreement: Bangladesh, India, Laos, China, Korea, and Sri Lanka
<b>APTERR</b>	ASEAN Plus Three Emergency Rice Reserve
<b>ASEAN</b>	Association of Southeast Asian Nations: established on 8 August 1967 in Bangkok, Thailand by Indonesia, Malaysia, the Philippines, Singapore, and Thailand. Brunei Darussalam (joined 8 January 1984), Vietnam (28 July 1995), Lao PDR, Myanmar (23 July 1997), and Cambodia (30 April 1999) later joined the association.

<b>ASEAN + 3</b>	ASEAN and China, Japan, and Korea are under separate negotiations to form separate FTAs and to have cooperation in a number of areas. The number after ASEAN may be greater or smaller in other occasions, depending on which countries are included in the separate FTA negotiations with ASEAN. For example, ASEAN + 1 means that only China is included; ASEAN + 5 includes China, Japan, Korea, Australia, and New Zealand, and ASEAN + 6 means that India is also taken into consideration.
<b>ASEM</b>	The Asia-Europe Meeting (ASEM) is an informal process of dialogue and co-operation bringing together the 27 European Union Member States and the European Commission with 16 Asian countries and the ASEAN Secretariat.
<b>BASIC</b>	Brazil, South Africa, India, and China
<b>BIMSTEC</b>	Bay of Bengal Initiative on Multi-Sectoral Technical and Economic Cooperation: Bhutan, Myanmar, Sri Lanka, Bangladesh, India, Nepal, and Thailand
<b>BOJ</b>	Bank of Japan
<b>BOK</b>	Bank of Korea
<b>BRIC</b>	Brazil, Russia, India, and China
<b>CBR</b>	Central Bank of the Russian Federation
<b>CDIAC</b>	Carbon Dioxide Information Analysis Center, US Department of Energy
<b>CDM</b>	Clean Development Mechanisms
<b>CEP</b>	Comprehensive Economic Partnership
<b>CEPEA</b>	Comprehensive Economic Partnership in East Asia
<b>CEPT</b>	Common Effective Preferential Tariff
<b>CGIM</b>	Credit Guarantee and Investment Mechanism
<b>CIS</b>	computer and information services
<b>CMI</b>	Chiang Mai Initiative
<b>CMIM</b>	Chiang Mai Initiative Multilateralization
<b>CMP</b>	Meeting of the Parties to the Kyoto Protocol
<b>COP</b>	Conference of the Parties
<b>COP/MOP</b>	Meeting of the Parties to the Kyoto Protocol
<b>CPIS</b>	Coordinated Portfolio Investment Survey, IMF
<b>D-8 PTA</b>	Preferential Tariff Arrangement—Group of Eight Developing Countries: Bangladesh, Malaysia, Pakistan, Egypt, Iran, Islamic Republic of, Nigeria, and Turkey
<b>DRC</b>	Development Research Center, China
<b>EAERR</b>	East Asia Emergency Rice Reserve
<b>EAFTA</b>	East Asia Free Trade Area
<b>EAS</b>	East Asia Summit
<b>EBOPS</b>	Extended Balance of Payments Services Classification

<b>EC</b>	European Commission
<b>ECB</b>	European Central Bank
<b>EEC</b>	European Economic Cooperation
<b>ECO</b>	Economic Cooperation Organization: Afghanistan, Azerbaijan, Iran, Islamic Republic of, Kazakhsatn, Kyrgyz Republic, Pakistan, Tajikistan, Turkey, Turkmenistan, and Uzbekistan
<b>EERP</b>	European Economic Recovery Plan
<b>EFTA</b>	European Free Trade Association: Iceland, Liechtenstein, Norway, and Switzerland
<b>ESCAP</b>	Economic and Social Commission for Asia and the Pacific, regional development arm of the United Nations
<b>ESI</b>	Economic Sentiment Indicator
<b>EST</b>	environmentally sound technology
<b>EU</b>	European Union, an economic and political union of 27 member states, located primarily in Europe.
<b>EWEC</b>	East-West Economic Corridor
<b>FDI</b>	foreign direct investment
<b>FIS</b>	financial and insurance services
<b>FOMC</b>	Federal Open Market Committee
<b>FTA</b>	free trade area/agreement
<b>FTAAP</b>	Free Trade Area of the Asia-Pacific
<b>GCC</b>	Gulf Cooperation Council, consisting of Saudi Arabia, Kuwait, Bahrain, Qatar, the United Arab Emirates, and the Sultanate of Oman as members. It was founded on May 26, 1981
<b>GDP</b>	gross domestic product
<b>GGGI</b>	Global Green Growth Institute
<b>GHG</b>	greenhouse gases (carbon dioxide, methane, nitrous oxide, and sulphur hexafluoride)
<b>GMS</b>	Greater Mekong Subregion
<b>GSTP</b>	Global System of Trade Preferences (among Developing Countries): Algeria, Argentina, Bangladesh, Benin, Bolivarian Republic of Venezuela, Bolivia, Brazil, Cameroon, Chile, Colombia, Cuba, Ecuador, Egypt, Former Yugoslav Republic of Macedonia, Ghana, Guinea, Guyana, India, Indonesia, Iran, Islamic Republic of, Iraq, Korea, Demprcratic People's Republic of, Korea, Republic of, Libyan Arab Jamahiriya, Malaysia, Mexico, Morocco, Mozambique, Myanmar, Nicaragua, Nigeria, Pakistan, Peru, Philippines, Singapore, Sri Lanka, Sudan, Tanzania, Thailand, Trinidad and Tobago, Tunisia, Vietnam, and Zimbabwe.
<b>GT</b>	giga ton (of carbon)
<b>IDM</b>	Integrated Domestic Market
<b>IPCC</b>	Intergovernmental Panel on Climate Change
<b>IPP</b>	intellectual property protection



<b>IPR</b>	intellectual property rights
<b>IT</b>	information technology
<b>ITES</b>	information technology-enabled services
<b>IUCN</b>	International Union for Conservation of Nature, also known as World Conservation Union
<b>JI</b>	Joint Implementation
<b>KIEP</b>	Korea Institute for International Economic Policy, Korea
<b>M&amp;A</b>	mergers and acquisitions
<b>MERCOSUR</b>	Southern Common Market: Brazil, Uruguay, Argentina, and Paraguay
<b>MPI</b>	Ministry of Planning and Investment
<b>MRC</b>	Mekong River Commission
<b>MSG</b>	Melanesian Spearhead Group: Fiji Islands, Papua New Guinea, Solomon Islands, and Vanuatu
<b>NAMA</b>	non-agricultural market access or nationally appropriate mitigation action
<b>NEAFTA</b>	Northeast Asian Free Trade Agreement
<b>NIE</b>	newly industrialized economy(ies)
<b>NIRA</b>	National Institute for Research Advancement, Japan
<b>OBS</b>	other business services
<b>OCA</b>	optimum currency area
<b>OLS</b>	ordinary least squares
<b>P4</b>	Trans-Pacific Strategic Economic Partnership Agreement between Brunei, Chile, New Zealand, and Singapore
<b>PACER</b>	Pacific ACP-EC Economy Partnership Agreement: Australia, Fiji Island, Maldives, Federated State of Micronesia, New Zealand, Palau, Samoa, Tonga, Vanuatu, Cook Islands, Kiribati, Marshall Islands, Nauru, Niue, Papua New Guinea, Solomon Islands, and Tuvalu.
<b>PAFTA</b>	Pan-Arab Free Trade Area: Bahrain, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libyan Jamahiriya, Morocco, Oman, Qatar, Saudi Arabia, Sudan, Syrian Arab Republic of, Tunisia, United Arab Emirates, and Yemen
<b>PBC</b>	People's Bank of China
<b>PgC</b>	Petagram of Carbon
<b>PICTA</b>	Pacific Islands Countries Trade Agreement: Cook Islands, Fiji Islands, Federated States of Micronesia (have't been in force), Kiribati, Nauru, Niue, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu (2008), and Vanuatu (2005)
<b>PNG</b>	(Papouasie-Nouvelle-Guinée): Solomon Islands, Tuvalu, Cook Islands, Kiribati, Micronesia, Federated States of, New Zealand, Palau, Samoa, Tonga, and Vanuatu
<b>PRC</b>	People's Republic of China
<b>PTA</b>	Preferential Trade Agreement

<b>PTN</b>	Protocol on Trade Negotiation: Bangladesh, Brazil, Chile, Egypt, Israel, Korea, Republic of, Mexico, Pakistan, Paraguay, Peru, Philippines, Serbia, Tunisia, Turkey, and Uruguay
<b>RBA</b>	Reserve Bank of Australia
<b>RBI</b>	Reserve Bank of India
<b>RBNZ</b>	Reserve Bank of New Zealand
<b>RCU</b>	Regional Currency Union
<b>REDD</b>	reducing emissions from deforestation and degradation
<b>RIETI</b>	Research Institute for Economy, Trade and Industry, Japan
<b>RITS</b>	Roadmap for Integration of Tourism Sector
<b>RMB</b>	renminbi, China's currency
<b>RTA</b>	Regional Trade Agreement
<b>SAARC</b>	South Asian Association for Regional Cooperation, established by Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka on December 8, 1985. In April 2007, Afghanistan became its eighth member.
<b>SACU</b>	Southern African Customs Union: Botswana, Lesotho, Namibia, South Africa, and Swaziland
<b>SAFTA</b>	South Asia Free Trade Area: Bangladesh, India, Sri Lanka, Bhutan, and Maldives
<b>SAPTA</b>	Agreement on SAARC Preferential Trading Arrangement: SAPTA (South Asian Preferential Trade Agreement): Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka
<b>SCO</b>	Shanghai Cooperation Organization: China, Kyrgyz Republic, Tajikistan, Kazakhstan, Russian Federation, and Uzbekistan
<b>SPARTECA</b>	South Pacific Regional Trade and Economic Cooperation Agreement: Fiji Islands, Marshall Islands, Nauru, Niue, PNG (Papouasie-Nouvelle-Guinée), Solomon Islands, Tuvalu, Cook Islands, Kiribati, Federated States of Micronesia, New Zealand, Palau, Samoa, Tonga, Vanuatu
<b>TIFA</b>	Trade and Investment Framework Agreement
<b>TPP</b>	Trans-Pacific Partnership
<b>TPS-OIC</b>	(Trade Preferential System of the Organization of the Islamic Conference): Bahrain, Cameroon, Guinea, Jordan, Libyan, Arab Jamahiriya, Pakistan, Syrian Arab Republic, Turkey, United Arab Emirates, Bangladesh, Egypt, Iran, Islamic Republic of, Lebanon, Senegal, Tunisia, Uganda
<b>TREATI</b>	Trans-Regional ASEAN-EU Trade Initiatives
<b>TRIPs</b>	Trade-Related Aspects of Intellectual Property Rights
<b>UNEP</b>	United Nations Environment Programme
<b>UNFCCC</b>	United Nations Framework Convention on Climate Change
<b>UNWTO</b>	World Tourism Organization
<b>WCN</b>	World Conservation Union, also known as International Union for Conservation of Nature
<b>WTO</b>	World Trade Organization
<b>WWF</b>	World Wildlife Fund

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# FOREWORD

This report represents a report card on the progress of economic integration in Asia under the current global financial crisis. It describes some of the major economic issues in the Asia-Australia region in the past, especially those events in the year 2009.

The report describes in detail the impacts of the global financial crisis on Asia, how the Asian economies performed during the crisis, how they responded to the hardship caused by the global financial crisis and the encouraging signs that Asia is leading the world on the recovery path. Notably, China and India, the two most populous and fast-growing economies were able to maintain positive growth throughout the crisis. Their outstanding performance in growth and recovery have contributed substantially to the global efforts to overcome the current difficulties.

With the severity of the global financial crisis Asia stood firm to intensify its efforts for closer economic cooperation among its members. The Asian economies are more inter-dependent on each other than ever before, with freer movements of goods, services, and capital. Faced with rising global protectionism, Asia called for greater trade and today's Asia has emerged as a great guardian of the free global trading system.

The report also examines the progress of economic integration and cooperation in Asia, including the ASEAN Plus Three process, the APEC and the possibility of fulfilling its goal of becoming a free trade area, the progress of economic integration in sub-regions of Asia. As a matter of fact, the process of economic integration in Asia is very much alive and is moving forward at a steady speed.

The Copenhagen Meeting, the environmental issues and the work done by the Asian governments are not ignored in this report. The significance of these issues is that in terms of climate change and environmental protection, there has not been any formal cooperation framework among Asian members. Thus, the issues provide new opportunities for intensified regional cooperation.

Asia is leading the world on the recovery path after the global financial crisis, and there is strong evidence that Asia will continue to maintain its vitality and dynamism. No doubt, economic integration in Asia is intensifying, with more intensive and extensive cooperation and mutual dependence among the economies, through the channels of trade, investment, finance, and macroeconomic coordination. We trust that the Asian members will make continued and joint efforts to overcome the current financial crisis and fulfill the goal of an integrated Asia.

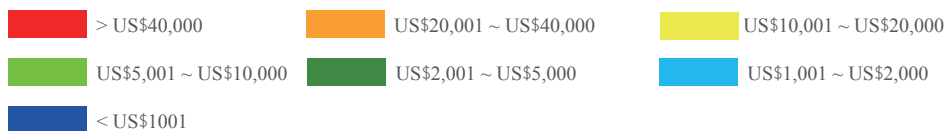
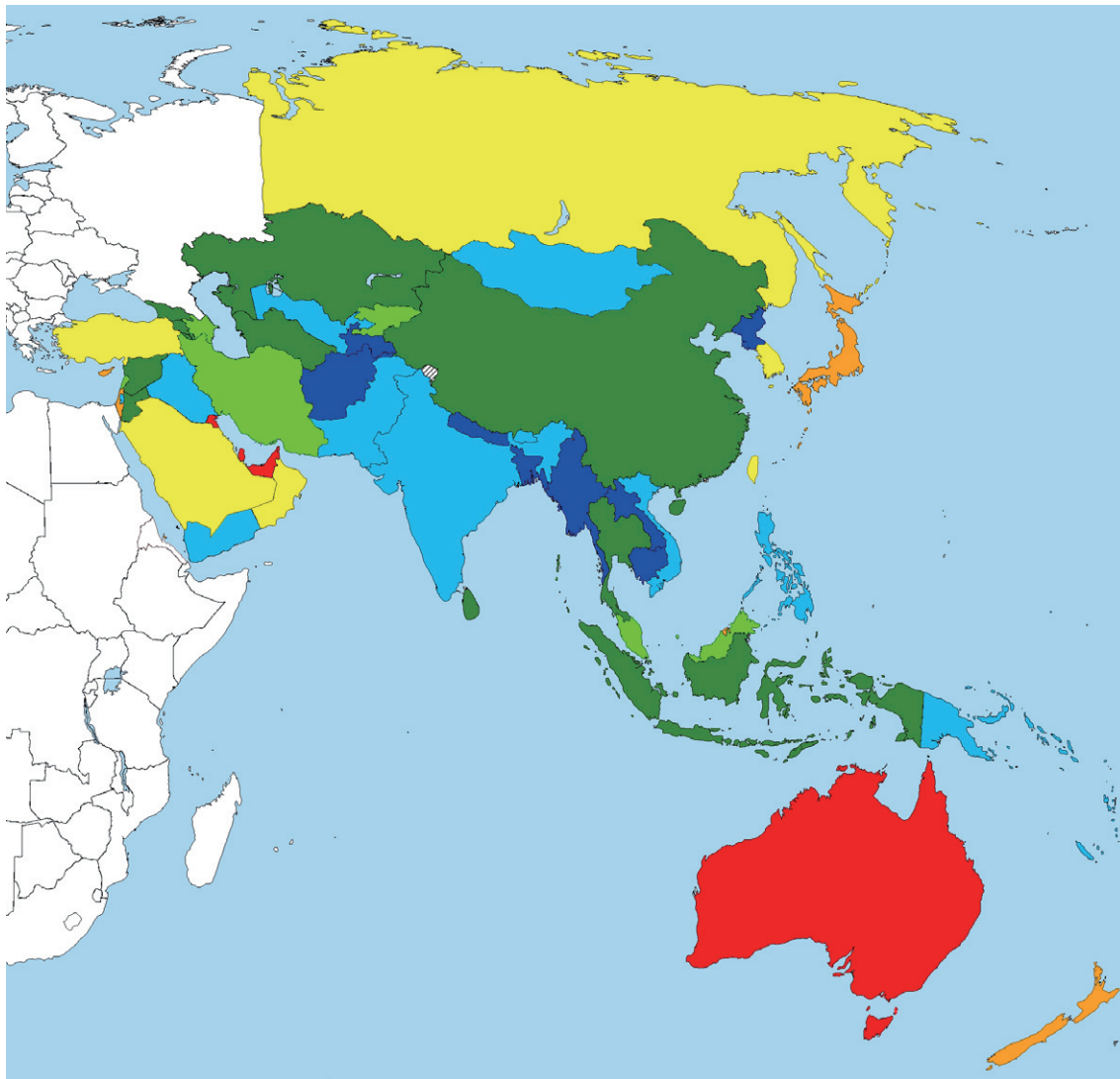


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# Asian and Australian Economies by Per Capita GDP, 2008



# Chapter 1

## The Asian Economies under the Global Financial Crisis: Recovery and Growth

### 1.1 Recovery and Growth of the Asian Economies

The 2008 global financial crisis severely hit many economies in Asia, but the year of 2009 brought hope to these economies. For most parts of Asia, the worst seemed to be over, and there were signs of recovery everywhere. Asia is still not back to the pre-crisis level yet, but the recent developments are encouraging.

The Asian economies experienced different performance levels during the crisis and adopted different policy packages to stimulate their economies. As a result, the economies followed different paths of recovery and performed quite differently.

China stood out to be the best performing economy after the outbreak of the global financial crisis. It had maintained positive growth in all quarters since late 2008, even though many other economies in Asia – large or small – experienced negative growth. China's economy grew with a strong rate of 9.0 percent in terms of its real GDP in the third quarter of 2008 on a year-on-year basis, just before the financial crisis, but the growth slowed down to 6.8 percent in the next quarter right after the outbreak of the financial crisis. After reaching a trough of 6.2 percent in the first quarter of 2009, China's GDP growth accelerated to 7.9 percent, 9.1 percent and 10.7 percent in subsequent quarters, resulting in an enviable annual growth of 8.7 percent in 2009. Seasonally adjusted quarter-on-quarter GDP growth showed a slightly different picture of China, with growth reaching a low at 4.3 percent in the final quarter of 2008, turning to

9.5 percent, 11.4 percent, 11.0 percent, and 11.3 percent in the four quarters of 2009. This was due to the large multiyear stimulus package announced at the end of 2008, which aimed to boost domestic demand in the midst of rapidly shrinking external demands. A simple decomposition of the source of growth in 2009 indicated that capital formation and final consumption contributed to 8 percentage points and 4.6 percentage points of GDP growth, respectively, while net exports dragged down GDP by 3.9 percent. Growth of external demand picked up along with the improving conditions in major Western economies towards the end of 2009. Growth of exports turned positive in December and the rise of exports was as high as 17 percent. In light of better growth prospects and the threat of the formation of a bubble in the properties market, China has started to tighten its monetary policy in early 2010.

The performance of other large emerging economies varied significantly. Similar to China, India showed a strong rebound of 6.1 percent and 7.9 percent in the second and third quarters of 2009, thanks to the government's expansionary policy, which helped bolster domestic demand. The growth of the whole year was estimated to be 5.6 percent. In contrast, Russia registered a negative growth of 7.9 percent in 2009, its worst performance since the default in 1998. Due to its heavy reliance on oil exports and external capital, Russia was hardest hit in the initial stage of the crisis. The most serious contraction of the economy (10.9 percent) was registered in the second quarter of 2009. When oil prices increased more substantially in the final months of 2009, exports showed remarkable

improvement. Its future development will continue to be highly affected by oil prices.

Australia was able to maintain a positive growth throughout 2009. Its GDP growth in the first three quarters of the year ranged between 0.4 percent and 0.6 percent, but the growth in the whole year is expected to be about 2.5 percent due to the low base of the final quarter of 2008. Apart from the increase in government spending, Australia benefited from the economic growth in China, which is the major buyer of its primary resources and energy products. Australia has been one of the few economies to witness inflationary pressure in the wake of economic recovery, with a rise of 2.1 percent in the CPI in the fourth quarter of 2009. In the consecutive months starting from October 2009, its central bank raised benchmark interest rates by 0.25 percent three times in a row, reaching a level of 3.75 percent.

Japan registered a poorer performance. The drop by 5.3 percent of its GDP in 2009 was accompanied by the return of deflation, which Japan has long been combating. This unsatisfactory result occurred despite an enormous amount of public spending and a lax monetary policy. Further expansion of fiscal spending will be constrained by its huge stock of public debts, which has already grown to a size twice that of the GDP. The growth of Japanese exports will continue to rely on the recovery of the financial markets in the US and the Euro zone. Although apparently China has already become the largest importer of Japan's products, China's recent strong rebound did not help Japan much because a substantial part of China's imports from Japan are used for the production of goods to be exported to Western markets.

The four newly industrialized economies (NIEs) were badly hit by the crisis in the first half of 2009, with GDP contracting by 5.4 percent. Taipei, China registered a shrinkage of its GDP by 9.9 percent, while Singapore and Hong Kong, China registered a GDP contraction of 6.4 percent and 5.7 percent, respectively. Korea fared relatively well, with GDP declining by 3.2 percent, and a strong sign of recovery was seen in the second half of the year. Growth of the NIEs as a whole was -0.1 percent in the third quarter and -1.3 percent for the whole year of 2009. However, there are signs that the recovery of these economies is not sufficiently robust. Korea's GDP growth (quarter-on-quarter, annualized) in the fourth quarter of 2009 slowed

to 0.2 percent, after the moderate recovery of 2.6 percent and 3.2 percent in the second and the third quarters, respectively. Singapore's record was even worse, registering a negative growth of 6.8 percent in the final quarter of 2009.

The ASEAN-5 (Indonesia, Malaysia, Philippines, Thailand, and Vietnam) was expected to be able to maintain a positive growth of 1.2 percent. However, the performance of the countries varied widely. Malaysia and Thailand, being the most open among the five, were severely affected by the global financial crisis in the first half of 2009, with the economy contracting by 5.1 percent and 6 percent, respectively. Although the contraction was easing in the second half of the year, they registered a negative growth of 2.5 to 3.0 percent for the whole year. In contrast, Vietnam and Indonesia were able to attain relatively strong growth of 5 percent and 4.3 percent, respectively, although their governments offered different stimulus packages. Vietnam provided several fiscal stimulus measures totaling 8.7% of its GDP, and one of these measures was a 30% cut in the corporate tax rate for small and medium-sized enterprises. By contrast, Indonesia's strong growth was partly the result of the soaring government spending, which was increased by 18 percent in the first half of 2009 as a result of pay raises to civil servants and election-related expenses. The Philippines, however, was able to maintain a mild growth of 1 percent. (See Figure 1.1)

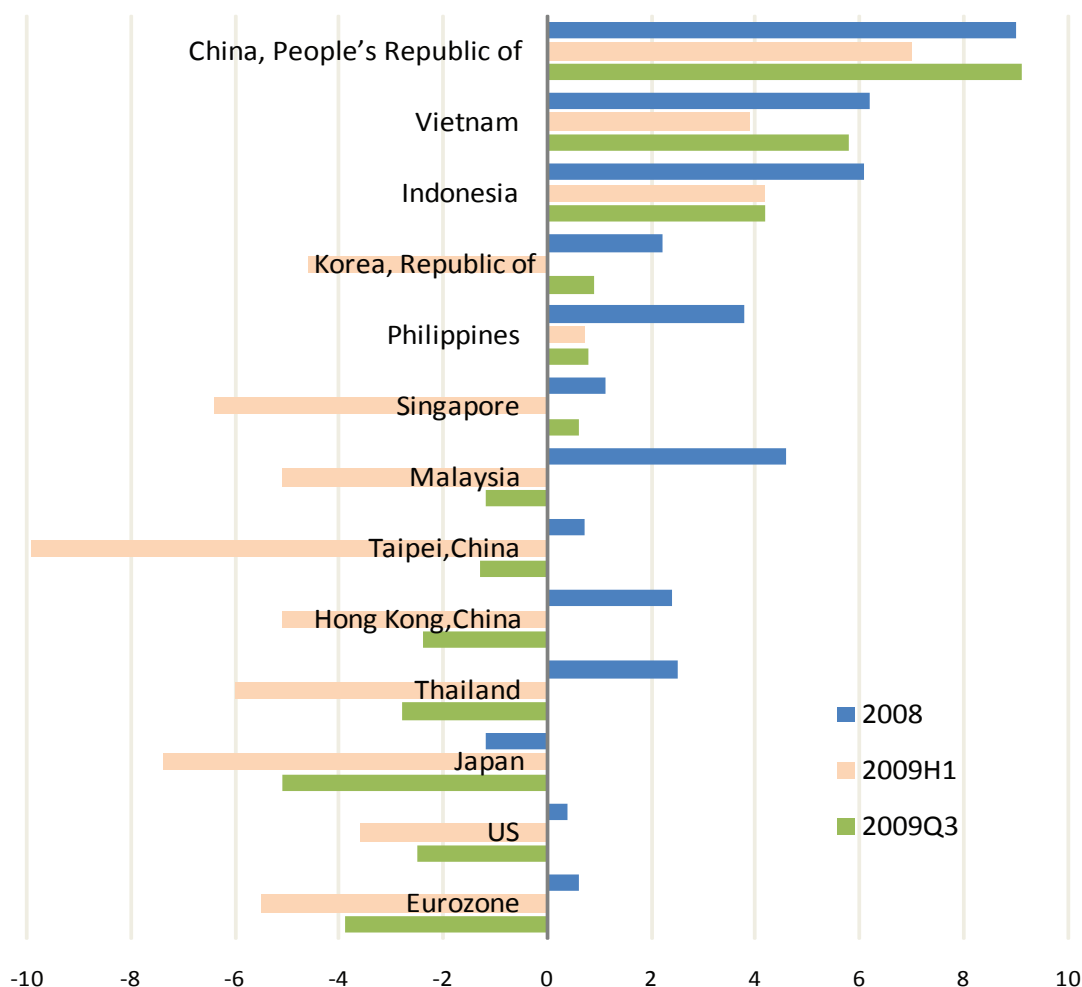
On the whole, the recovery so far has been quicker and stronger than most could have expected. However, a number of perplexing problems have posed uncertainty over the sustainability and robustness of the recovery of the US and other major advanced economies. How the economic growth of Asian countries will be affected has yet to be seen.

## 1.2 Responses of the Central Banks of the Asian Economies

Different governments in Asia reacted differently to the global financial crisis, but most of them focused on monetary policies. This section gives a description of the major actions of the Central Banks to stimulate their economies.

On the eve of the outbreak of the subprime rate and financial crisis in the US, China was still experiencing rapid growth, with the RMB reserve requirement ratio for depository financial institutions





**Figure 1.1 GDP Growth of Major Asian Economies (year-on-year, %)**

Sources: Asian Development Bank, *Asia Economic Monitor*, December 2009, p.39, Table 12.

continuing to rise. The ratio had been raised to an average of 17.5 percent shortly before the collapse of Lehman Brothers. In September 2008, the People's Bank of China (PBC) started to lower the reserve requirement ratio, a reverse of its previous monetary policy. At the end of December 2008, the ratio reached an average level of 14.5 percent and was kept fixed throughout 2009<sup>1</sup>. In the fourth quarter of 2009, China recorded a big jump in exports and new loans, as well as a sharp increase in asset prices,

especially in the properties markets. As a result, in January 2010, PBC surprised the world by raising its reserve requirement ratio by 0.5 percent, the first time since June 2008.

India experienced great economic growth before the collapse of Lehman Brothers. Thus, India's central bank, the Reserve Bank of India (RBI), had been moderately increasing its Repo rate<sup>2</sup>. In August 2008, the rate was raised to 9 percent. Then, starting from October 2008, RBI cut the Repo rate in several steps. The rate then reached a low level of 4.75 percent in April 2009. In the last quarter of 2009, noticing the improvement of the global economy,

<sup>1</sup> Note that the decrease of the reserve requirement ratio was different between small, medium, and major banks. Here, we take a simple average of the ratios applied to different financial institutions.

<sup>2</sup> Repo signifies injection of liquidity.

RBI had started to study the conditions and timing of implementing an “exit strategy.” Although the Repo rate was still maintained at 4.75 percent in the latest Statement by Dr D. Subbarao, the Governor of RBI, the cash reserve ratio of scheduled banks’ net demand and time liabilities was increased by 75 basis points from 5 percent to 5.75 percent.<sup>1</sup>

Russia took a different path in its monetary policy in response to the global financial crisis. The Central Bank of the Russian Federation (CBR) slightly raised its Refinancing Rate to 11 percent in July 2008. After the outbreak of the crisis, the world prices of Russia’s main export commodities such as oil dropped significantly. The deterioration of the terms of trade and capital outflow led to the threat of devaluation and imported inflation. In response to this situation, CBR on the one hand gradually widened the band of exchange rate fluctuation and on the other hand further pushed up the Refinancing Rate (to 13 percent in December 2008). The rate was maintained at this high level until late April 2009, when the inflation began to slow down. Then CBR made ten successive cuts of its Refinancing Rate to 8.75 percent by the end of

2009.<sup>2</sup> (See Figure 1.2)

The Bank of Japan (BOJ) implemented various monetary policies to stimulate its economy in response to the global financial crisis, including lowering its already-low interest rates. On December 19, 2008, BOJ announced that it was lowering the target for uncollateralized overnight call rates to 0.1 percent. This rate has remained fixed since then.<sup>3</sup> (The Statement on Monetary Policy, January 26, 2010). Since its interest rate was already very low, to facilitate corporate financing and to secure stability in its financial markets, it introduced measures such as outright purchases of various corporate financing instruments (e.g., CP and corporate bonds), expanding the range of eligible collateral, resumption of purchases of stocks held by financial institutions, and provision of subordinated loans to banks, etc.<sup>4</sup>

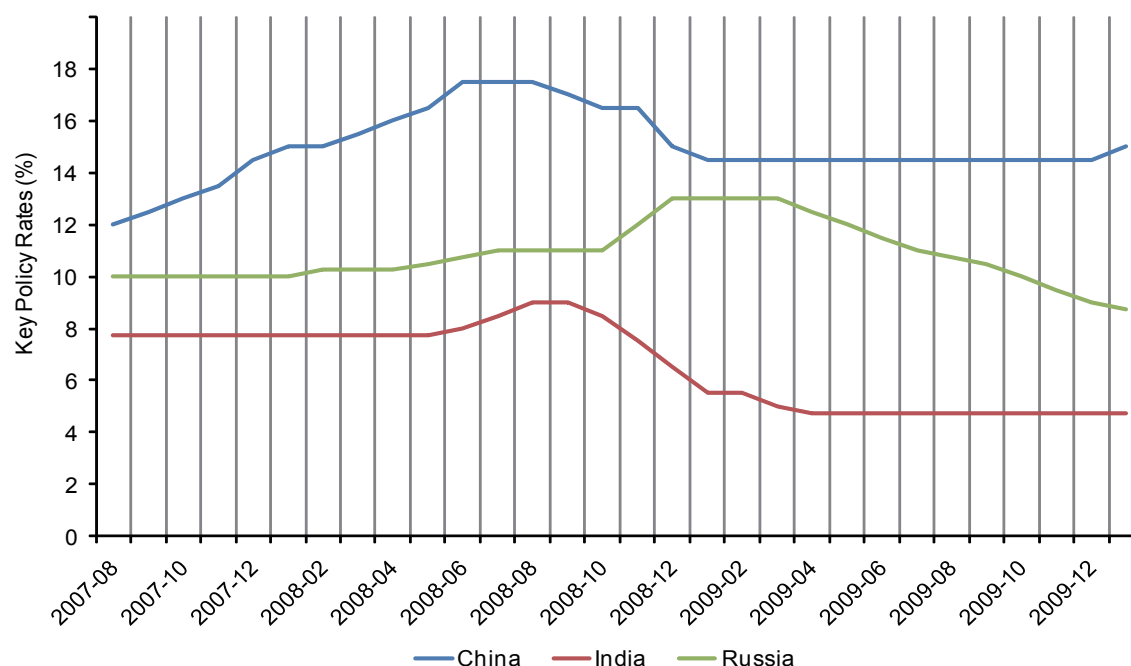
Korea also responded to the financial crisis by introducing similar policy measures. Shortly

<sup>1</sup> Annual Policy 2009-2010, RBI.

<sup>2</sup> Annual Report of CBR 2008; Quarterly Inflation Review 2009Q3, CBR

<sup>3</sup> The Statement on Monetary Policy, Bank of Japan, January 26, 2010.

<sup>4</sup> The Bank of Japan’s Policy Measures in the Current Financial Crisis, Bank of Japan.



**Figure 1.2 Responses of the Central Banks of China, India, and Russia**

Sources: People’s Bank of China, Reserve Bank of India, Bank of Russia

after increasing its Base Rate<sup>1</sup> to 5.25 percent in August 2008, the Bank of Korea (BOK) decreased it substantially to 2 percent between October 2008 and February 2009. The rate was maintained throughout 2009. In addition to lowering its interest rate, the BOK also introduced measures such as broadening the eligible collateral and securities for open market operations, increasing liquidity provision to financial institutions, increasing the aggregate credit ceiling, paying direct interests on banks' required reserve deposits, raising banks' capital by purchasing their subordinated bonds, hybrid bonds and preferred stocks, supplying foreign currency liquidity, and easing restrictions on foreign currency loans.<sup>2</sup> (Policy Response to the Financial Turmoil, BOK)

Taipei, China moderately increased its major interest rates before the collapse of Lehman Brothers. Then, its central bank started successive reductions of the rates. In February 2009, its discount rate, the rate on accommodations with collateral, and the rate on accommodations without collateral were

reduced to 1.25, 1.625, and 3.5 percent, respectively. (See Figure 1.3)

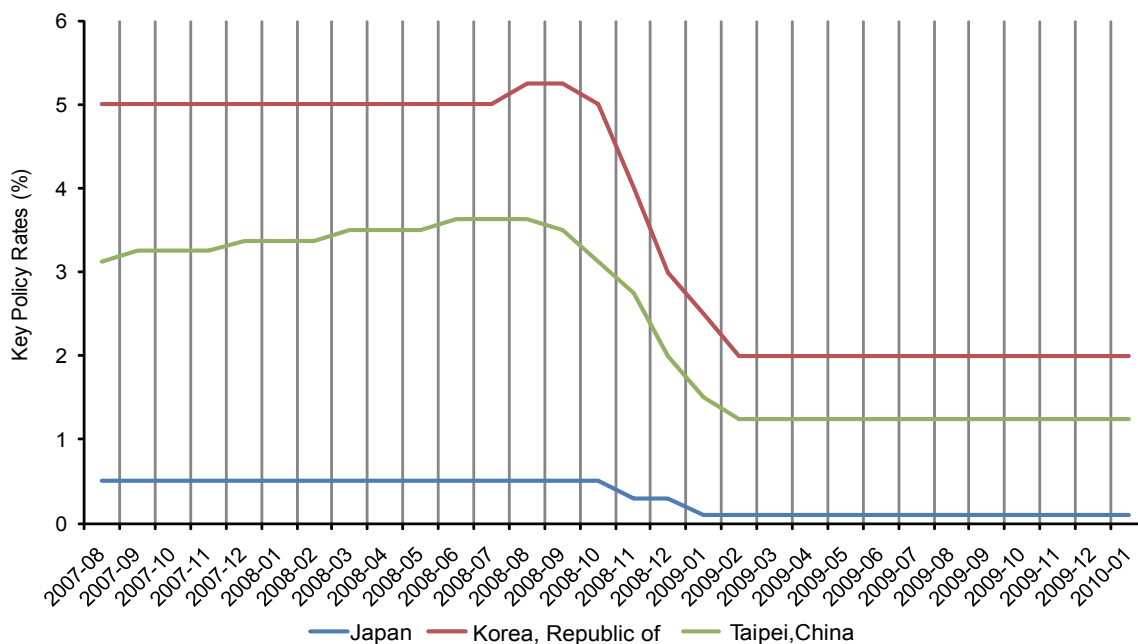
The impact of the global financial crisis on the South-East Asia-Oceania region was relatively mild, and the region recovered faster than the Western countries.

The Australian economy was stronger than expected after the global financial crisis. As spending and investment were not as weak as expected, Australia was among the first major nations to start raising the interest rate, starting from October 2009. In his statement on October 6, 2009, Glenn Stevens, the Governor of the Reserve Bank of Australia (RBA) stated that "The global economy is resuming growth. ... Prospects for Australia's Asian trading partners appear to be noticeably better. Growth in China has been very strong, which is having a significant impact on other economies in the region and on commodity markets." RBA successively increased the cash rate, which is the rate charged on overnight loans between financial intermediaries, in November and December. The Bank then kept the rate unchanged at least until February 2010.<sup>3</sup>

<sup>1</sup> The reference rate applied in transactions between the Bank of Korea and financial institution counterparts

<sup>2</sup> Policy Response to the Financial Turmoil, Bank of Korea.

<sup>3</sup> Media Releases, Reserve Bank of Australia.



**Figure 1.3 Responses of the Central Banks of Japan, Republic of Korea, and Taipei, China**

Sources: Bank of Japan, Bank of Korea, Central Bank of Taiwan

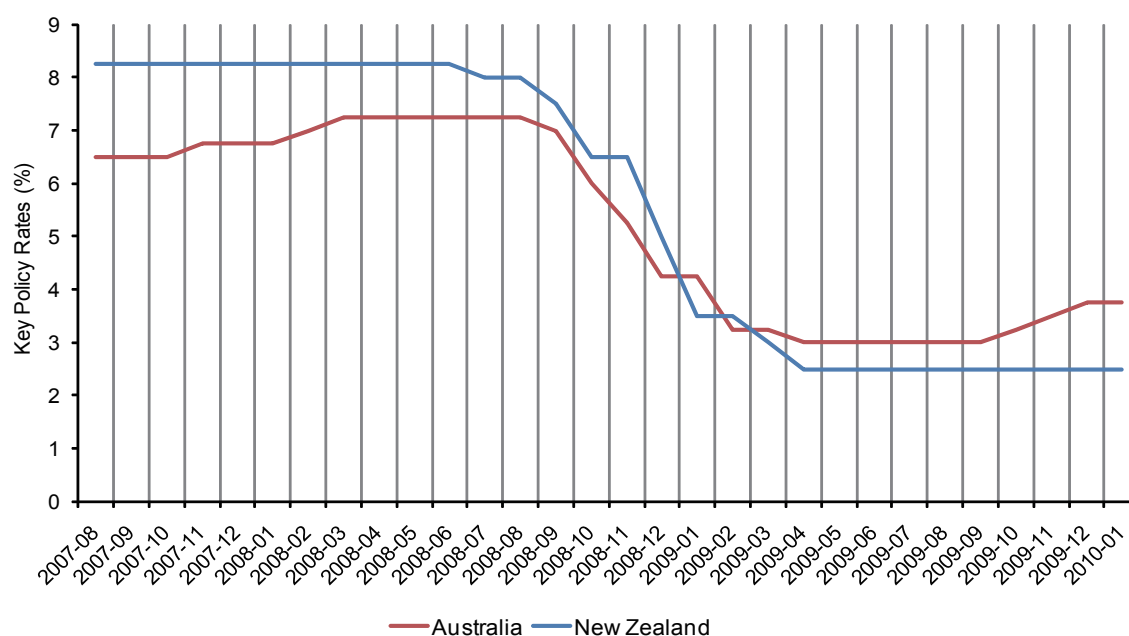
The Reserve Bank of New Zealand (RBNZ) cut its cash rate roughly at the same pace as Australia did. Although it had not followed Australia and raised the interest rate in the last quarter of 2009, RBNZ also stated that “Global activity continues to recover, helping push New Zealand’s export commodity prices higher. Economic growth is most apparent in China, Australia, and emerging Asia.” If New Zealand’s economy continues to recover, RBNZ “would expect to begin removing policy stimulus around the middle of 2010.”<sup>1</sup> (See Figure 1.4)

Hong Kong, China adopted a fixed exchange rate policy. Even though Singapore is usually more active in managing its exchange rate, its exchange rate was very stable during the period

after the subprime mortgage crisis began in 2007. This means that the monetary policies of both economies followed closely those of the US and the Western world. (See Figure 1.5)

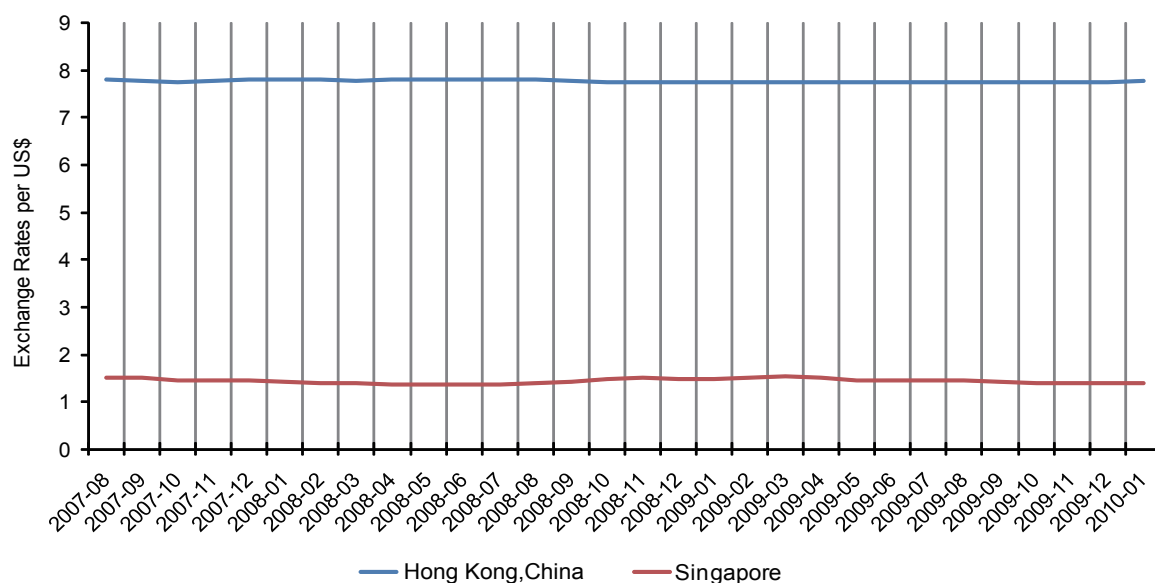
The major economies of the South-East Asia were not hit severely by the global financial crisis. The Overnight Policy Rate set by the Central Bank of Malaysia was exceptionally stable over the period after the US’s subprime mortgage crisis began in 2007. Thailand, Indonesia, and the Philippines had slightly raised their key policy rates shortly before the collapse of Lehman Brothers because of moderate expansion in their economies. Then, entering 2009, they cut their interest rates successively. Nevertheless, the drops of their interest rates were relatively mild, as compared with those of the US and other Western countries. (See Figure 1.6)

<sup>1</sup> News releases, Reserve Bank of New Zealand, January 28, 2010.



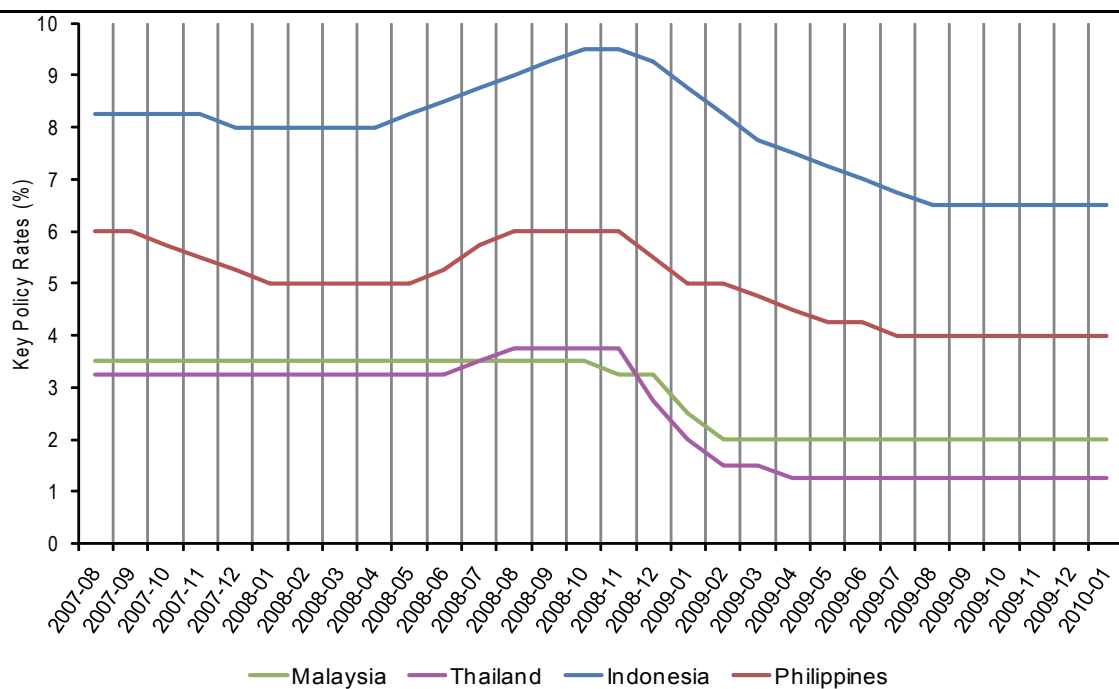
**Figure 1.4 Responses of the Central Banks of Australia and New Zealand**

Sources: Reserve Bank of Australia, Reserve Bank of New Zealand



**Figure 1.5 Responses of the Central Banks of Hong Kong, China and Singapore**

Sources: Monetary Authority of Hong Kong, China, Monetary Authority of Singapore



**Figure 1.6 Responses of the Central Banks of Malaysia, Thailand, Indonesia, and the Philippines**

Notes: 1 Some central banks cut their key policy rates twice in a month, some central banks set a range for their policy rates, and some central banks applied different rates to different institutes; therefore, in those circumstances, the indicated values in the figures are actually simple averages of the policy rates within the corresponding month.

2 The policy rates of different countries may be of different financial instruments; therefore, they are not directly comparable.

Sources: Central Bank of Malaysia, Bank of Thailand, Bank Indonesia, Bangko Sentral ng Pilipinas

### 1.3 Protectionism and Its Containment

It is very difficult to insulate outward oriented economies from the precipitous fall in exports that accompany the severe recession in the advanced economies. Right after the outbreak of the global financial crisis, there was a growing concern about the rise in protectionism both in Asia and the world. However, confidence began to turn the corner as the expansion of the G-7 to G-20 as the major international forum dealing with the crisis gave much needed voices to emerging economies. The G-20 Leaders Summit held in November 2008 pledged the world to hold protectionist pressures in check. But the pledge was quickly violated as some countries began to adopt international trade measures to boost domestic demand and reduce imports. Restrictive trade measures including policies to support exports, increasing import duties and anti-dumping actions were also applied.

Table 1.1 gives a summary of international trade measures taken by Asia-Pacific economies between October 2008 and July 2009. Several measures were undertaken. These included export support measures (China, Hong Kong, China, India, Indonesia, Japan, Malaysia, New Zealand, and Russian Federation). However, Vietnam went in the opposite direction by increasing export duties on sand and stones, mineral products and wood materials in December 2008. In contrast, import duties were raised on a large number of items by

many countries. These included India, Indonesia, Kazakhstan, the Philippines, Taipei, China, Turkey, and Vietnam. Again there were exceptions to this as Malaysia, the Philippines, Korea, and the Russian Federation lowered some tariffs and/or relaxed some import controls. By far, the biggest area of activity was anti-dumping. China, India, and Turkey initiated anti-dumping actions in a number of cases. Quantitative restrictions were also used by many countries including China, India, Indonesia, Malaysia, Thailand, Indonesia, the Philippines, and the Russian Federation.

With the bitter lessons of the Great Depression in the 1930s and due to the efforts of various governments, the voices against protectionism were also strong. For example, at the APEC's 17th informal leadership meeting held in November 2009, the Chinese President Hu Jintao again called for curbing trade protectionism and promoting the Doha Round to speed up. He reiterated China's position to strongly support the facilitation liberalization of global trade and investment. Overall, the increase in protectionism to date have been rather moderate given the magnitude of the economic turmoil. There is no comparison with the increases in protectionism that occurred during the 1930s. According to the recent report by WTO, new measures to restrict trade have generally been limited in scope and most countries have continued to avoid an escalation of protectionism.

Table 1.1 Trade Measures Taken by Asia-Pacific Economies, Regional Members and Associate Members of ESCAP (October 2008 to July 2009)

Country/Region	Date	Measure
China, People's Republic of	November 2008 to February 2009	Export support measure: Increase in VAT rebate rates on certain exports.
	1 December 2008	Elimination of export duties on 102 products. Reduction of export duties on 23 products.
	December 2008	Import bank on Irish pork.
	29 December 2008	Initiation of anti-dumping investigation against iron and steel fasteners from the EU
	1 January 2009	Elimination of lower interim import tariff rates on certain products.
	1 January 2009	Cancellation of export licensing administration on certain silk products.
	12 February 2009	Anti-dumping investigation on terephthalic acid from Thailand and Republic of Korea.
	24 February 2009	Restrictions on the export of certain highly energy-consuming, highly-polluting and exhaustible resource products.
	10 April 2009	Auditing and approval of state purchases of imported goods.
		Domestic products shall be purchased if they can meet the demand.
	30 April 2009	Elimination of security testing and certification requirements for US information technology products.
	5 May 2009	Ban on pigs and pork imports to safeguard stock industry and human health from H1N1 virus.
	26 May 2009	Implementation of State Council Opinion on imported goods. Prioritization of local content in government contracts.
	19 June 2009	Cut of export taxes on various products such as grain, rice, soya, wire wool and chemical fertilizers.
	1 July 2009	Elimination of tariffs for 28 goods originating in Hong Kong, China and 475 goods originating in Macao, China.
	1 July 2009	Pilot project for cross-border national currency (Chinese yuan) trade.
	1 August 2009	Automated import licensing for certain milk and milk related products.
Hong Kong, China	26 November 2008	Establishment of the State-owned "Hong Kong Export Credit Insurance Corporation (ECIC)" to encourage trade by providing exporters with insurance protection against non-payment risk.

Country/Region	Date	Measure
India	31 October 2008	Elimination of export duties on steel products.
	3 November 2008	Ministry of Health Decree No. 1010/08 regulating registration and imports of pharmaceutical products.
	18 November 2008	Increase in import duties on a range of iron and steel products from 0% to 5%.
	21 November 2008	Introduction of licensing requirements for imports of certain steel products and auto parts.
	28 November 2008 to April 2009	Temporary imposition of tariffs on soybean oils.
	7 December 2008	Elimination of export duties on iron ore fines; and other reduction of export duties on lumps.
	14 January 2009	New mandatory product quality certification for 17 steel imported products.
	20 January 2009	Removal of export duty and reduction of minimum export price for premium Basmati rice.
	23 January 2009	Recommendation to apply provisional anti-dumping duties on Full Draw Yarn (FDY) imported from China, Thailand and Vietnam.
	23 January 2009 to 2 March 2009	Temporary ban on import of toys from China (six months), except with certification.
	29 January 2009	Provisional safeguard measures imposed on phthalic anhydride.
	13 February 2009	Changes in FDI regulations to facilitate application of caps on foreign ownership in sensitive sectors.
	14 February 2009	Increase in the minimum support price for cotton paid to local farmers.
	24 February 2009	Imposition of 24% duty on imported soybean oils.
	26 February 2009	Export incentives for a variety of exporters.
	26 February 2009	Trade facilitation measures such as removal of import restrictions and simplification of export licensing.
	1 April 2009	Monetary incentives for leather and textile exports.
	15 May 2009	Imposition of anti-dumping duty between 76% and 223% on import of plastic processing machines from China.
	9 June 2009	Imposition of extra levy on compact disc-recordable (CD-Rs).
	15 June 2009	Imposition of a safeguard duty of up to 35% for some aluminum products for two years.
	18 June 2009	Imposition of quality restrictions on mobile phones, dairy products and toys to block imports from China.
	20 June 2009	Imposition of anti-dumping duty on vitamin-C imports from China for a period of five years.
	24 June 2009	Up to 30% duty on import of key aluminum products from China.
	27 July 2009	Ban on imports of chocolate and chocolate products from China.
	25 November 2008	Restrictions on film imports.
Indonesia	1 January 2009 to 1 February 2009	New licensing, reporting and pre-shipment inspection requirements on over 500 goods. Restriction on entry points for those products.
	13 February 2009	Increase of import tariffs on 17 tariff lines mainly affecting products that compete with locally manufactured products.
	13 February 2009	Reduction on import tariffs on 18 lines.
	18 February 2009	New procedures for the import of steel and iron products into Indonesia.
	26 February 2009	Civil servants are encouraged to purchase domestic goods and services.



Country/Region	Date	Measure
Indonesia	1 April 2009	New regulation stipulating that exports of certain products with an export value exceeding \$1 million must be supported by letters of credit issued by domestic banks.
	19 June 2009	Government eases imports for 26 textile products.
	1 July 2009	Buy national and State aid support for footwear manufacturers.
	25 November 2009	Restriction on film imports.
	1 February 2009	Special safeguard measures on food preparations of flour, meal or starch and tubers of konnyaku.
	1 January 2010	Application of ban on foreign films operating in Indonesian waters.
	28 December 2008	Reduction of import tariffs on equipment and raw materials that are not locally produced.
Japan	6 March 2009	Special safeguard on yoghurt.
	11 March 2009	Price-based safeguard on rice.
	1 April 2009	Green tax initiative on environmentally friendly cars. Temporary lower taxation burden on automobiles that meet higher environmental standards.
	28 May 2009	Provision of long-term finance to own subsidiaries abroad and their supply chains.
	1 June 2009	New volume-based safeguard on yoghurt.
	28 December 2008	Increase in import tariffs on finished goods, competing with local production.
	1 February 2009	Anti-crisis program includes "Buy Kazakh" clause. Government should increase the share of products from domestic producers.
Kazakhstan	March 2009	As from March 2009, tariff on imports of crude oil increased to 3%.
	26 June 2009	Tariff treatment of miscellaneous products.
	14 November 2008	Liberalization of imports of iron and steel products.
	14 November 2008	Elimination of import licenses for the construction and manufacturing sector.
	14 November 2008	Import duty exemption for raw materials and intermediate goods.
	4 February 2009	Temporary change in the mandate of the New Zealand Export Credit Office, in order to provide short-term trade credit insurance at market rates on a temporary basis.
	2 March 2009	Extension of anti-dumping duties on Indonesian limit rubber exports in order to increase world prices.
Malaysia	1 July 2009	Malaysia, Thailand and Indonesia limit rubber exports in order to increase world prices.
	1 August 2009	Review of steel policy that will ultimately lead to reduction of import tariffs.
	4 September 2008	New "Mineral Ore Export Permit" for the transport/shipment of mineral ores.
	7 November 2008	Tariff reduction to 0% for certain products
	18 November 2008	Imposition of a volume-based special safeguard for dried day lilies.
	27 February 2009	Provisional safeguard on steel angle bars for 200 days.
	27 April 2009	Ban on pigs and pork imports to safeguard stock industry and human health from H1N1 virus.
New Zealand	14 November 2008	Elimination of the current 10% import duty on cement.
Philippines		
Korea, Republic of		

Country/Region	Date	Measure
Russian Federation	6 November 2008	Reduction of import tariffs on certain products.
	24 December 2008	Export duties on certain wood products, not raised as scheduled.
	15 February 2009	Elimination of export duties on nickel and copper. Reduction of export duties on oil.
	5 May 2009	Import ban from certain US facilities which do not meet technical requirements.
	3 June 2009	Ban on pigs and pork imports to safeguard stock industry and human health from H1N1 virus.
	25 June 2009	Import ban on pork on supplies from the US.
	1 July 2009	Elimination of tariffs on chemicals for leather production.
	2 July 2009	Quotas for trade in milk and cheese between the Russian Federation and Belarus.
	23 July 2009	Temporary minimum tariff on plates, sheets, film, foil and strips of plastic.
	1 August 2009	Temporary minimum tariff on pentaerythritol.
	12 August 2009	Temporary restriction of Australian kangaroo meat.
	14 August 2009	Temporary import tariffs on laundry equipment.
	21 October 2008	Minimum tariffs on bodies (including cabs), for specific motor vehicles.
	6 February 2009	Additional duties as a safeguard measure imposed on imports of cotton yarn.
Taipei, China	6 August 2009	Imposition of a volume-based special safeguard for other liquid milk.
Turkey	6 November 2008	Amendments to temporary tariff reductions.
	31 December 2008	Temporary increase of import tariffs (for nine months) on a number of products.
	17 March 2009	Import tariff increased on a number of products.
Vietnam	26 December 2008	Initiation of three anti-dumping investigations.
	10 February 2009	Increase export duties on sand and stones, mineral products and wood materials.
	1 April 2009	Import tariffs raised on newsprint paper and uncoated paper.
		Increased import tariffs on semi iron and non alloy steel.

Source: ESCAP (2010), *Asia Pacific Trade and Investment Report 2009: Trade-led Recovery and Beyond*.

# Chapter 2

## Trade and Investment Flows

### 2.1 Foreign Trade of Asian Economies

Foreign trade remains an important economic activity for nearly all the economies in Asia. This is measured both by the contribution of trade to GDP and by the percentage of workers working in industries that are related to foreign trade. Many Asian economies are so trade-dependent that their volumes of trade are consistently higher than the levels of their GDP.

There have been signs showing that the intra-regional trade of most Asian economies, i.e., trade among themselves, had been growing with rates higher than those of the total foreign trade of these economies. This means that Asian economies are now more interdependent on each other than on the economies outside the region. This phenomenon is due to the continuing efforts of relevant Asian governments in liberalizing foreign trade, including the establishment of free trade areas and the signing of cooperative agreements.

#### 2.1.1 Intra-regional Trade and Trade with Other Economies

Many notable government policies have contributed to the rapid rise in intra-regional trade. In particular, there has been an increase in Asian intra-regional trade of parts and components. As an illustration, we focus on the so-called "factory Asia" phenomenon.

Table 2.1 presents top imports and exports of parts and components between the Mainland of China, Taipei, China and Hong Kong, China as a group and East Asia, between this group and the

European Union (EU) and between the group and NAFTA. The top five imports and exports are — electronic components, parts of telecommunication equipment, textile yarns, parts of office machinery and parts of switchgear. What seems new for the trade between them and East Asia is the prominent role of parts of motor vehicles. This shows that there is a network of production in automobile sector among them and East Asia.

Comparing across the trade pattern in the three regions, several observations can be made:

(1) The absolute value of exports and imports between the Mainland of China, Taipei, China and Hong Kong, China and East Asia is much larger compared with China-EU or China-NAFTA. This is to be expected given that the network of production sharing, like other forms of trade, is enhanced by proximity. Trade and production network tends to be regional. The pan-Asian trade and production network is deep and thick.

(2) The Mainland of China, Taipei, China and Hong Kong, China imports much more of all parts and components from East Asia than it exports. But the opposite is true for EU and NAFTA. In other words, they run a trade deficit in parts and components with East Asia, but they run a surplus with EU and NAFTA.

(3) For the Mainland of China, Taipei, China and Hong Kong, China and NAFTA, almost half (49.3 percent) of all imports of parts and components from NAFTA consist of electronic components. While the value in absolute terms is still small (particularly compared with East Asian imports of electronic parts), this may signal the potential of a trans-pacific network in the electronics sector.

**Table 2.1 The Major Products of Parts and Components in the Trade of the Mainland of China, Taipei, China and Hong Kong, China with East Asia, European Union and NAFTA Markets, 2008**

Market	SITC	Product of Parts and Components	Exports (US\$ mn)	Export Share (%)	SITC	Product of Parts and Components	Imports (\$ million)	Import Share (%)
East Asia (9)	776	Parts of electronic components	36 049	27.5	776	Parts of electronic components	125 967	57.1
	764	Parts of telecommunication equipment	29 581	22.6	764	Parts of telecommunication equipment	23 246	10.5
	65	Textile yarn, fabrics & made-up materials	16 784	12.8	759	Parts of office and adding machinery	16 085	7.3
	759	Parts of office and adding machinery	13 588	10.4	772	Parts of switchgear	15 272	6.9
	772	Parts of switchgear	8 675	6.6	65	Textile yarn, fabrics & made-up materials	8 486	3.8
	784	Parts & motor vehicles and accessories	3 817	2.9	784	Parts & motor vehicles and accessories	7 047	3.2
	691	Parts of structure in iron and steel	2 584	2.0	88411	Parts of unmounted optical elements	5 008	2.3
	7239	Parts of construction machinery	1 562	1.2	7239	Parts of construction machinery	1 847	0.8
	88411	Parts of unmounted optical elements	1 017	0.8	7133	Internal combustion engines for marine	1 610	0.7
	82122	Mattress supports and cushion for furniture	1 011	0.8	7139	Parts of internal combustion engines	1 465	0.7
		All above parts & components (10 items)	114 667	87.6		All above parts & components (10 items)	206 031	93.4
		Total parts & components Exports (75 items)	130 923	100.0		Total parts & components Imports (75 items)	220 587	100.0
		As % of all goods		32.0		As % of all goods		38.7
	0 to 9	All goods exports	409 766		0 to 9	All goods imports	569 516	

Market	SITC	Product of Parts and Components	Exports (US\$ mn)	Export Share (%)	SITC	Product of Parts and Components	Imports (\$ million)	Import Share (%)
EU (27)	764	Parts of telecommunication equipment	31 118	33.1	776	Parts of electronic components	7 888	19.2
	776	Parts of electronic components	14 895	15.8	772	Parts of switchgear	5 853	14.2
	759	Parts of office and adding machinery	11 697	12.4	784	Parts & motor vehicles and accessories	4 282	10.4
	65	Textile yarn, fabrics & made-up materials	9 464	10.1	764	Parts of telecommunication equipment	3 938	9.6
	772	Parts of switchgear	4 611	4.9	65	Textile yarn, fabrics & made-up materials	2 364	5.7
	784	Parts & motor vehicles and accessories	3 119	3.3	7149	Parts of other engines and motors	1 736	4.2
	81242	Parts of lighting fittings and base metals	2 936	3.1	759	Parts of office and adding machinery	1 038	2.5
	691	Parts of structure in iron and steel	1 691	1.8	8749	Parts of instruments and accessories	1 007	2.4
	625	Rubber tyres for wheels	1 559	1.7	7139	Parts of internal combustion engines	978	2.4
	78539	Parts of carriages and cycles	1 440	1.5	7132	Internal combustion engines for vehicles	937	2.3
		All above parts & components (10 items)	82 530	87.7		All above parts & components (10 items)	30 020	73.0
		Total parts & components Exports (75 items)	94 089	100.0		Total parts & components Imports (75 items)	41 111	100.0
		As % of all goods		25.4		As % of all goods		22.6
	0 to 9	All goods exports	370 782		0 to 9	All goods imports	181 586	

Market	SITC	Product of Parts and Components	Exports (US\$ mn)	Export Share (%)	SITC	Product of Parts and Components	Imports (\$ million)	Import Share (%)
NAFTA (3)	764	Parts of telecommunication equipment	29,445	32.3	776	Parts of electronic components	16,844	49.3
	759	Parts of office and adding machinery	10,607	11.6	764	Parts of telecommunication equipment	3,486	10.2
	65	Textile yarn, fabrics & made-up materials	9,286	10.2	759	Parts of office and adding machinery	2,508	7.3
	784	Parts & motor vehicles and accessories	6,172	6.8	772	Parts of switchgear	2,098	6.1
	776	Parts of electronic components	4,915	5.4	7149	Parts of other engines and motors	1,110	3.3
	772	Parts of switchgear	4,475	4.9	65	Textile yarn, fabrics & made-up materials	945	2.8
	7239	Parts of construction machinery	3,789	4.2	7929	Parts of aircraft	922	2.7
	625	Rubber tyres for wheels	3,230	3.5	8749	Parts of instruments and accessories	813	2.4
	81242	Parts of lighting fittings and base metals	2,718	3.0	784	Parts & motor vehicles and accessories	659	1.9
	82122	Mattress supports and cushion for furniture	1,892	2.1	72849	Parts of machines for other special industry	607	1.8
		All above parts & components (10 items)	76,528	83.9		All above parts & components (10 items)	29,992	87.9
		Total parts & components Exports (75 items)	91,221	100.0		Total parts & components Imports (75 items)	34,135	100.0
		As % of all goods		24.5		As % of all goods		23.1
	0 to 9	All goods exports	373,001		0 to 9	All goods imports	147,589	

**Notes:** The classifications of country groups are defined as follow: East Asia (9) = Indonesia, Japan, Korea, Republic of, Malaysia, Mongolia, Philippines, Singapore, Thailand and Vietnam. European Union (27) = EU 25 members plus Bulgaria and Romania. NAFTA(3) = Canada, Mexico, and United States.

**Source:** Computations based on UN COMTRADE Statistics.

### 2.1.2 Challenges to Asia's Trade Growth

Foreign trade has long been regarded as important growth factors for many economies<sup>1</sup>. This argument may be supported by the growth experience of many Asian economies. First, Japan took off in the fifties and sixties, and very quickly its economy became highly advanced and developed. Then in the seventies, the four newly industrialized economies started to grow with impressive rates<sup>2</sup>. Not too long later, many other economies in Asia started to follow. The two most populated countries in Asia, China and India, achieved impressive growth rates in recent decades.

All these fast-growing Asian economies share one common feature: they are all highly trade dependent. Table 2.2 presents the total trade values of important Asian economies from 1970 to 2008. The total trade value of China increased from US\$4.86 billion to US\$2743.56 billion, with an average growth rate of 14.83 percent. The average growth rate of real GDP was over 9 percent. However, several issues of Asian trade need attention. First, while Asian economies put up a lot of effort to diversify their foreign trade by expanding their export of services, different economies had different degrees of success. On the one hand, the newly industrialized economies, especially Hong Kong, China and Singapore, did quite well in exporting various types of services. The Mainland of China, with its rising economy and its rich historical and cultural heritage, was successful in promoting its tourist sector.<sup>3</sup> India, on the other hand, is still heavily dependent on its export of manufactured exports, but the development of the software part of its IT sector was not so impressive.

Second, for the distribution of trade gains among global trade players, the value-added of Asian industries (the main source of gain from exports) does not change much while their total trade expands significantly over time (See Table 2.3). It may indicate that Asian economies in general still locate at the downside of "industry stream", in which they most engage in labor-intensive manufacturing activities, receiving only small share

of total benefits.

Third, in general, trade may have two opposite effects on jobs: creation of more jobs due to an expansion of exportable industries and diversion of jobs to other countries because of contraction of importable industries. Asian governments are aware of these two effects. Apparently they put more emphasis on creation of jobs by promoting the exportable sector. However, the expansion in exports sector does necessarily not mean that the total employment in the economy would increase. Export expansion would shift resources from non-tradable sector to tradable sector and it has strong resource allocation effects. But it may, in many cases, have little effect on the net employment of the economy. Tables 2.4 and 2.5 show that Asian employments in absolute terms had increased significantly while unemployment rates remained fairly steady.

Fourth, while trade may bring more job opportunities, nominal wage rates do not seem to have increased for most Asian economies. (See Table 2.6) This helps keep the industries in these economies competitive in the international markets, but it also implies that the benefits of trade the workers are enjoying are main in the form of increase in employment (through increase in the output levels) but not in the form of increase in the wage rates.

### 2.1.3 Trade in Services Less Affected

The global financial crisis proved to be detrimental to world trade, but its damage to merchandise trade was more than that to trade in services. In 2007, world exports of commercial services grew by 19 percent, but the growth rate dropped to 17 percent in 2008. In dollar terms (not adjusted for price changes and exchange rate fluctuations), world exports of commercial services rose by 11 percent in 2008, to US\$3.7 trillion. The fastest-growing categories in 2008 was transport (15 percent growth), followed by travel (10 percent) and other commercial services (10 percent). Other commercial services such as financial services, was just over half of the total value of exports (51 percent), while travel and transport each represented about a quarter (25 percent and 23 percent, respectively). For 2008 as a whole, exports of commercial services grew more slowly than exports of goods (on a balance of payments basis), rising by 11 percent compared with 15 percent for goods.

1 See, for example, Long and Wong (1998) for a survey. Chou and Wong (2001) found empirical evidence to support the assertion that trade is an engine of growth for China.

2 The four newly industrialized economies, often called the four little dragons or tigers, are Hong Kong, China, Singapore, Taipei, China and Korea.

3 See Section 2.1.4.

Table 2.2 Total Trade Values (Goods and Services) (US Million Dollars)

Year	China, People's Republic of	India	Japan	Korea, Republic of	Australia	Hong Kong, China	Taipei, China	Singapore	Russia	Thailand	Malaysia	Vietnam	Philippines
1970	4 863	4 746	41 374	3 332	10 792	6 809	-	-	-	2 438	3 367	-	2850
1971	5 695	5 144	47 584	3 995	11 535	7 785	-	-	-	2 567	3 388	-	3028
1972	7 417	5 569	57 405	4 679	12 891	9 177	-	-	-	3 053	3 715	-	3139
1973	11 097	7 707	82 916	8 287	16 051	13 212	-	-	-	4 161	5 950	-	4503
1974	14 561	10 848	128 306	12 427	23 424	15 817	-	-	-	6 243	9 190	-	7218
1975	14 760	12 066	127 569	13 368	28 177	16 199	-	-	-	6 153	8 463	-	7168
1976	14 082	13 092	147 634	18 330	28 207	21 659	-	-	-	7 294	10 340	-	7621
1977	15 533	15 324	169 541	23 356	31 577	25 181	-	-	-	8 966	12 240	-	8878
1978	20 258	17 672	198 888	30 967	33 371	31 164	-	-	-	10 563	15 193	-	10355
1979	31 719	22 765	242 775	39 494	39 952	40 090	-	-	-	14 198	21 960	-	13255
1980	41 026	28 606	299 254	45 980	48 423	51 376	44 645	-	-	17 626	27 669	-	16888
1981	47 836	27 948	334 519	52 842	55 886	56 931	49 200	-	-	18 806	27 821	-	18182
1982	45 461	28 242	307 262	52 575	58 870	55 200	46 616	-	-	17 398	29 715	-	17259
1983	47 350	29 801	308 968	56 662	51 745	56 715	51 933	-	-	18 974	32 681	-	16414
1984	58 222	29 718	344 250	62 463	55 289	68 627	60 240	-	-	20 092	36 324	-	15421
1985	73 581	30 000	340 887	61 211	58 703	72 813	58 812	-	-	19 122	32 778	-	14110
1986	78 406	30 444	372 867	73 709	60 252	85 936	73 514	-	-	21 191	29 642	6115	14547
1987	87 819	35 123	427 270	97 264	61 768	115 842	100 757	-	-	28 920	36 018	7624	17549
1988	109 011	39 997	519 868	123 153	76 991	149 471	126 753	-	-	41 572	43 252	4818	20963
1989	117 810	44 940	567 601	137 204	95 772	170 962	139 404	-	217 362	52 315	53 102	3644	24856
1990	123 508	49 788	604 679	150 308	99 741	194 224	143 576	-	186 605	64 676	64 700	5263	26942
1991	144 247	45 969	636 856	170 495	104 542	232 444	164 533	-	133 747	77 085	78 276	6436	28243
1992	180 950	45 781	664 649	179 256	107 031	281 495	183 054	-	508 882	86 883	89 088	7260	33459
1993	214 419	54 884	696 529	190 722	109 739	316 541	196 179	-	298 880	100 205	105 654	8727	38692
1994	264 588	65 709	769 573	228 729	116 780	361 763	212 658	-	201 311	119 359	133 995	12618	47397



Year	China, People's Republic of	India	Japan	Korea, Republic of	Australia	Hong Kong, China	Taipei, China	Singapore	Russia	Thailand	Malaysia	Vietnam	Philippines
1995	319 857	82 418	887 762	303 803	138 104	419 496	254 330	-	218 267	151 827	170 660	15494	59695
1996	325 805	86 162	887 876	330 116	152 414	437 589	257 658	-	187 725	154 032	183 315	22859	74398
1997	371 655	94 050	879 320	337 591	164 422	456 059	277 037	-	191 357	142 749	185 979	25326	89138
1998	371 014	99 838	768 938	274 476	158 976	414 741	256 401	-	151 118	113 949	151 202	26394	72298
1999	411 287	113 863	828 700	318 197	151 406	410 449	273 976	-	135 946	127 260	172 204	29483	78272
2000	530 249	126 006	957 601	396 151	169 456	477 058	334 361	-	176 847	153 311	206 719	35078	82669
2001	570 734	126 186	838 976	349 269	166 624	454 584	274 142	315 054	187 367	144 678	188 690	36446	72258
2002	693 408	151 985	839 365	373 066	162 819	476 217	289 569	325 505	206 057	154 405	201 042	41638	77549
2003	933 927	185 239	947 002	440 782	186 096	527 687	320 067	370 312	254 457	177 701	214 008	49341	83767
2004	1 262 370	265 954	1 136 368	560 313	224 735	616 162	398 519	464 501	334 408	220 290	262 441	63122	91720
2005	1 548 978	344 583	1 241 784	640 681	268 945	684 356	438 657	537 363	433 277	261 389	292 601	75456	98133
2006	1 914 450	434 066	1 351 368	742 203	304 783	759 112	489 665	635 546	543 056	296 431	330 387	91047	111940
2007	2 376 935	539 990	1 612 515	863 892	348 706	838 866	531 209	715 644	674 380	341 077	373 594	114641	122144
2008	2 743 556	661 564	1 857 829	993 798	438 744	891 757	583 273	818 054	899 818	436 184	414 828	-	126114

Note: All data are at current prices.

Sources: World Development Indicators Online, <http://ddp-ext.worldbank.org/ext/DDPQQ/member.do?method=getMembers>  
UNCTAD Handbook of Statistics Online, <http://www.unctad.org/Templates/Page.asp?intItemID=1890&lang=1> United Nations Com"

Table 2.3 Value-added of Industry (US Million Dollars)

Year	China, People's Republic of	India	Japan	Korea, Republic of	Australia	Hong Kong, China	Taipei, China	Singapore	Russia	Thailand	Malaysia	Vietnam	Philippines
1970	37 054.19	11 822.22	92 716.79	2 110.70	-	-	2 063.62	-	-	1 793.27	1 171.56	-	2 132.31
1971	41 546.84	13 191.31	103 686.54	2 258.39	-	-	2 533.02	-	-	1 995.19	1 292.62	-	2 397.34
1972	48 291.83	14 173.29	135 571.35	2 605.56	18 186.10	-	3 249.31	-	-	2 230.77	1 597.58	-	2 687.40
1973	58 962.50	16 223.29	187 371.64	3 701.80	22 120.56	-	4 633.23	-	-	2 885.55	2 394.86	-	3 440.35
1974	60 779.11	19 995.47	200 283.24	4 998.15	29 721.15	-	5 783.89	-	-	3 651.53	3 404.87	-	4 753.62
1975	73 690.72	20 035.70	206 921.97	5 704.96	33 251.81	-	6 084.47	1 841.18	-	3 837.25	3 359.77	-	5 212.82
1976	68 878.13	21 986.08	232 852.62	8 239.88	36 411.82	-	7 874.61	1 977.47	-	4 691.18	4 119.76	-	6 180.97
1977	81 230.48	25 947.49	279 362.83	10 999.79	37 495.76	-	9 408.87	2 164.06	-	5 803.92	5 043.77	-	7 237.51
1978	70 943.09	30 461.79	395 196.68	15 822.11	40 023.57	-	11 809.52	2 567.70	-	7 095.79	6 298.58	-	8 373.88
1979	83 195.65	34 874.96	410 202.66	21 133.06	44 743.38	-	14 604.58	3 272.39	-	8 305.99	8 449.55	-	10 305.45
1980	91 333.33	41 364.49	433 488.85	20 755.15	50 328.02	8 459.27	18 396.31	4 295.70	-	9 278.52	10 234.03	-	12 586.81
1981	89 503.97	44 216.85	478 392.95	23 084.74	61 177.75	9 226.69	21 113.48	5 055.17	-	10 488.59	10 266.05	-	13 963.78
1982	90 954.20	45 939.38	438 137.91	24 993.84	64 887.56	8 916.59	20 747.29	5 409.30	-	10 797.61	10 337.57	-	14 420.84
1983	101 386.98	50 306.58	468 115.95	28 671.87	57 994.01	8 715.28	22 900.37	6 340.12	-	12 246.43	11 820.65	-	13 030.21
1984	110 917.86	49 793.08	502 531.68	32 956.15	63 338.07	9 774.37	26 469.28	7 040.51	-	13 365.16	13 317.19	-	11 906.25
1985	131 517.01	54 285.69	534 887.07	33 745.20	59 315.95	9 657.94	27 785.10	6 156.65	-	12 386.98	12 241.15	3 854.96	10 777.90
1986	130 223.18	58 352.51	781 768.58	40 256.06	59 124.58	11 423.81	34 405.22	6 371.77	-	14 257.61	10 881.28	7 606.40	10 327.25
1987	117 748.88	65 253.98	946 265.59	52 112.89	57 854.42	13 682.23	46 090.98	7 209.93	-	16 849.98	12 398.79	10 397.11	11 430.27
1988	135 539.10	69 391.72	1 154 125.78	70 503.92	69 546.42	15 338.33	53 221.56	9 054.75	-	21 324.68	13 529.10	6 092.15	13 318.86
1989	147 327.94	71 533.17	1 154 485.43	85 362.49	84 602.55	16 905.51	60 454.90	10 266.84	236 013.16	26 192.05	15 463.30	1 443.56	14 858.02
1990	147 560.23	77 166.89	1 195 830.26	98 495.54	88 002.31	17 969.58	63 242.36	12 163.09	232 584.88	31 769.36	18 577.40	1 467.42	15 275.17
1991	158 574.92	62 536.52	1 355 577.62	118 835.48	88 540.93	18 437.14	70 075.40	14 888.14	233 627.14	37 975.15	20 688.70	2 287.45	15 448.51
1992	183 665.62	58 106.03	1 434 532.17	123 068.72	86 041.68	19 421.52	80 699.98	16 905.81	194 438.04	42 414.49	24 338.54	2 690.10	17 395.91
1993	205 133.82	65 327.19	1 582 819.75	136 561.85	82 460.65	19 503.36	82 915.57	19 492.61	176 310.31	50 580.50	26 814.42	3 809.34	17 769.27
1994	260 426.75	78 978.68	1 672 156.33	158 588.96	85 158.77	19 926.89	86 283.90	22 971.22	162 836.08	58 682.14	29 823.19	4 701.64	20 846.63

Year	China, People's Republic of	India	Japan	Korea, Republic of	Australia	Hong Kong, China	Taipei, China	Singapore	Russia	Thailand	Malaysia	Vietnam	Philippines
1995	343 438.26	90 132.68	1 804 846.80	195 130.24	95 915.50	20 807.20	89 768.55	27 537.85	136 614.46	68 409.87	36 778.47	5 962.87	23 764.74
1996	406 954.35	95 952.10	1 587 619.31	206 351.30	102 193.47	22 369.07	93 794.16	30 182.27	138 462.33	74 164.30	43 898.81	7 330.73	26 582.60
1997	452 881.87	101 006.33	1 449 197.42	189 651.11	108 029.43	23 337.52	95 627.53	30 998.96	140 466.72	60 605.18	44 648.80	8 610.07	26 459.74
1998	471 113.99	100 128.83	1 283 029.79	127 336.31	99 639.83	22 335.51	86 220.35	27 481.02	91 973.21	44 333.30	31 667.46	8 840.74	20 501.48
1999	495 681.46	104 364.60	1 430 745.14	160 032.89	94 807.62	21 293.59	89 343.97	26 321.13	65 621.45	50 075.18	36 771.58	9 894.36	23 307.68
2000	550 299.55	110 352.11	1 510 427.73	181 236.65	100 152.61	21 416.30	93 417.51	30 703.76	88 091.01	51 533.56	45 319.74	11 449.91	24 493.82
2001	598 182.82	111 451.21	1 268 025.96	164 385.55	88 041.21	19 882.42	80 562.02	26 446.58	97 613.99	48 688.76	42 868.68	12 462.68	22 535.01
2002	651 166.81	123 663.66	1 189 383.35	184 904.12	90 711.59	18 294.21	81 323.42	27 339.69	104 104.03	53 846.45	45 496.84	13 495.01	24 448.60
2003	754 331.56	144 915.96	1 280 781.66	209 876.81	109 177.64	16 472.60	79 568.43	28 032.64	128 992.61	62 237.12	51 330.79	15 340.85	25 438.86
2004	892 905.47	180 511.43	1 400 942.39	247 019.00	142 419.26	16 002.70	82 436.30	34 516.36	180 658.02	70 017.95	60 541.32	18 256.54	27 558.06
2005	1 066 163.06	213 214.52	1 381 577.75	285 645.24	165 415.73	15 957.78	86 498.50	37 085.70	256 326.19	77 605.94	68 581.76	21 660.13	31 497.47
2006	1 293 826.97	246 672.96	1 312 884.78	317 108.37	186 175.50	16 079.90	88 889.73	42 696.57	320 930.15	91 839.13	77 683.60	24 854.75	37 210.56
2007	1 640 473.22	317 654.48	-	349 467.53	219 022.53	15 286.84	-	47 597.77	426 179.12	107 702.78	89 095.59	28 559.61	45 465.71
2008	2 103 352.52	324 750.39	-	310 185.20	271 287.14	-	-	47 540.57	-	-	-	-	52 826.23

Note: All data are at current prices.

Sources: World Development Indicators Online, <http://ddp-ext.worldbank.org/ext/DDPOQ/member.do?method=getMembers>  
UNCTAD Handbook of Statistics Online, <http://www.unctad.org/Templates/ Pages.asp?intItemID=1890&lang=1>

Table 2.4 Unemployment Rate of Total Labor Force (%)

Year	China, People's Republic of	India	Japan	Korea, Republic of	Australia	Hong Kong, China	Taipei, China	Singapore	Russia	Thailand	Malaysia	Vietnam	Philippines
1980	4.90	-	2.01	5.19	6.10	3.80	1.23	5.75	-	0.89	-	-	4.80
1981	3.80	-	2.27	4.50	5.78	3.60	1.36	5.93	-	1.30	-	-	5.40
1982	3.20	-	2.29	4.36	7.16	3.62	2.13	6.28	-	2.53	-	-	5.50

Year	China, People's Republic of	India	Japan	Korea, Republic of	Australia	Hong Kong, China	Taipei, China	Singapore	Russia	Thailand	Malaysia	Vietnam	Philippines
1983	2.30	-	2.66	4.06	9.96	4.43	2.71	5.57	-	2.90	-	-	4.89
1984	1.90	-	2.68	3.80	8.98	3.82	2.44	6.14	-	4.77	5.80	-	7.00
1985	1.80	-	2.63	3.98	8.25	3.17	2.91	4.57	-	3.70	6.90	-	6.07
1986	2.00	-	2.75	3.80	8.08	2.82	2.66	2.01	-	3.50	8.30	-	6.40
1987	2.00	-	2.87	3.08	8.10	1.72	1.97	3.90	-	5.77	7.30	-	9.10
1988	2.00	-	2.53	2.51	7.22	1.35	1.69	2.58	-	3.04	7.20	-	8.34
1989	2.60	-	2.24	2.56	6.17	1.06	1.57	1.78	-	1.38	6.30	-	8.42
1990	2.50	-	2.09	2.45	6.92	1.31	1.66	1.78	-	2.20	5.10	-	8.12
1991	2.30	-	2.05	2.40	9.59	1.81	1.51	1.75	-	2.70	-	-	8.98
1992	2.30	-	2.15	2.51	10.80	1.95	1.51	1.80	5.31	1.40	3.70	-	8.64
1993	2.60	-	2.53	2.87	10.89	1.96	1.45	1.70	5.90	1.50	3.00	-	8.86
1994	2.80	3.62	2.88	2.47	9.74	1.90	1.56	1.73	8.10	1.34	-	-	8.43
1995	2.90	2.19	3.15	2.06	8.49	3.21	1.79	1.75	9.65	1.14	3.10	-	8.35
1996	3.00	2.13	3.38	2.04	8.54	2.83	2.60	1.65	9.86	1.07	2.50	1.92	7.41
1997	3.00	2.59	3.37	2.60	8.45	2.21	2.72	1.43	11.80	0.87	2.50	2.86	7.85
1998	3.10	3.55	4.07	6.96	7.71	4.58	2.69	2.50	13.39	3.40	3.19	2.29	9.37
1999	3.10	-	4.67	6.34	6.93	6.20	2.92	2.80	13.52	2.96	3.43	2.32	9.15
2000	3.10	4.31	4.77	4.42	6.27	4.93	2.99	2.68	9.80	2.38	2.98	2.25	10.13
2001	3.60	-	5.03	4.00	6.77	5.08	4.57	2.65	8.90	2.59	3.50	2.76	9.80
2002	4.00	-	5.38	3.27	6.42	7.27	5.17	3.55	7.92	1.80	3.50	2.12	10.16
2003	4.30	-	5.22	3.56	6.05	7.85	4.99	3.95	8.23	1.53	3.60	2.25	10.15
2004	4.20	5.02	4.68	3.67	5.53	6.74	4.44	3.35	7.78	1.51	3.54	2.14	10.91
2005	4.20	-	4.40	3.73	5.09	5.57	4.13	3.13	7.16	1.34	3.50	-	7.37
2006	-	-	4.09	3.43	4.78	4.76	3.91	2.65	7.16	1.22	3.50	-	7.39
2007	-	-	3.88	3.23	4.36	3.98	3.91	2.13	6.10	1.17	3.10	-	6.25
2008	-	-	3.99	3.20	4.24	3.52	4.14	2.23	6.30	1.20	3.30	-	7.40

Sources: World Economic Outlook Database, <http://www.imf.org/external/pubs/ft/weo/2009/01/weodata/index.aspx>  
LABORSTA Internet, <http://laborsta.ilo.org/STP/guest>

Table 2.5 Employment (Million Persons)

Year	China, People's Republic of	India	Japan	Korea, Republic of	Australia	Hong Kong, China	Taipei, China	Singapore	Russia	Thailand	Malaysia	Vietnam	Philippines
1980	423.61	-	55.36	13.68	6.28	2.40	6.55	1.17	-	22.52	4.79	-	17.15
1981	437.25	-	55.81	14.02	6.42	2.39	6.67	1.26	-	20.87	5.07	-	17.81
1982	452.95	-	56.38	14.38	6.41	2.41	6.81	1.33	-	21.61	5.25	-	18.61
1983	464.36	-	57.33	14.51	6.30	2.43	7.07	1.37	-	22.91	5.46	-	19.37
1984	481.97	-	57.66	14.43	6.49	2.51	7.31	1.38	-	23.80	5.57	-	19.37
1985	498.73	-	58.07	14.97	6.70	2.63	7.43	1.35	-	25.85	5.65	-	20.33
1986	512.82	-	58.53	15.51	6.97	2.70	7.73	1.33	-	26.69	5.76	-	20.93
1987	527.83	-	59.11	16.35	7.13	2.73	8.02	1.38	-	27.64	5.98	-	20.80
1988	543.34	-	60.11	16.87	7.18	2.76	8.11	1.45	-	29.46	6.18	-	21.50
1989	563.29	-	61.28	17.56	7.72	2.75	8.26	1.52	-	30.61	6.39	-	21.85
1990	639.09	-	62.49	18.09	7.84	2.75	8.28	1.60	-	30.84	6.69	-	22.53
1991	647.99	-	63.69	18.68	7.67	2.80	8.44	1.66	-	31.14	-	-	22.98
1992	655.54	-	64.36	19.03	7.61	2.79	8.63	1.72	71.07	32.38	7.05	-	23.92
1993	668.08	-	64.50	19.33	7.64	2.86	8.75	1.74	68.64	32.15	7.38	-	24.44
1994	674.55	344.64	64.53	19.91	7.90	2.93	8.94	1.80	64.79	32.09	-	-	25.17
1995	680.65	343.83	64.57	20.43	8.22	3.00	9.05	1.86	64.15	32.57	7.65	-	25.70
1996	689.50	347.06	64.86	20.82	8.32	3.16	9.07	1.77	62.93	32.23	8.40	35.39	27.44
1997	698.20	350.40	65.57	21.11	8.39	3.24	9.18	1.85	60.02	33.16	8.57	35.60	27.89
1998	706.37	340.60	65.14	19.99	8.57	3.28	9.29	1.88	58.46	32.14	8.60	36.95	26.97
1999	713.94	-	64.62	20.28	8.72	3.32	9.39	1.92	62.95	32.09	8.84	38.12	27.74
2000	720.85	-	64.46	21.16	8.95	3.37	9.49	2.13	65.07	33.00	9.27	38.37	27.45
2001	730.25	-	64.12	21.57	9.06	3.43	9.38	2.06	65.12	33.48	9.36	39.00	29.16
2002	737.40	-	63.30	22.17	9.25	3.49	9.45	2.05	66.66	34.26	9.54	40.16	30.06
2003	744.32	-	63.16	22.14	9.46	3.50	9.57	2.07	66.43	34.68	9.87	41.18	30.64
2004	752.00	-	63.29	22.56	9.62	3.52	9.79	2.11	67.28	35.71	9.98	42.32	31.61
2005	758.25	-	63.56	22.86	9.97	3.54	9.94	2.29	68.17	36.30	10.05	42.53	32.31
2006	764.00	-	63.82	23.15	10.22	3.58	10.11	2.35	68.86	36.34	10.28	43.34	32.64
2007	769.90	-	64.12	23.43	10.51	3.63	10.29	2.51	70.57	37.12	10.54	44.17	33.56
2008	774.80	-	63.85	23.58	10.74	3.67	10.40	2.51	70.97	37.84	10.66	44.92	34.09

Sources: World Economic Outlook Database, <http://www.imf.org/external/pubs/ft/weo/2009/01/weodata/index.aspx>  
LABORSTA Internet, <http://laborsta.ilo.org/STP/guest>

Table 2.6 Wage Per Month (US Dollar)

Year	China, People's Republic of	India	Japan	Korea, Republic of	Australia	Hong Kong, China	Taipei,China	Singapore	Russia	Thailand	Malaysia	Vietnam	Philippines
1980	-	74.2	1 161.6	289.8	1 532.7	-	-	-	-	63.5	-	-	-
1981	-	71.4	1 265.5	312.0	1 618.4	-	-	-	-	70.3	-	-	-
1982	-	65.9	1 159.2	336.5	1 549.9	-	-	-	-	72.8	-	-	-
1983	-	69.6	1 251.6	352.1	1 447.2	-	-	-	-	78.4	-	-	124.5
1984	-	70.4	1 307.1	368.4	1 511.6	-	473.8	-	-	140.1	-	-	108.1
1985	-	59.8	1 329.3	372.7	1 271.0	-	491.8	-	-	123.6	-	-	150.7
1986	32.1	70.6	1 940.7	398.2	1 309.9	-	-	522.8	-	120.7	-	-	116.5
1987	32.7	66.6	2 322.6	469.9	1 457.9	483.9	-	557.3	-	-	257.1	-	131.3
1988	39.1	65.6	2 662.2	610.2	1 745.0	564.5	-	633.2	-	-	267.6	-	144.0
1989	42.8	51.8	2 588.3	805.1	1 889.3	636.0	-	716.9	-	139.8	-	-	165.2
1990	37.3	56.5	2 556.6	907.5	1 955.7	752.9	-	844.1	-	146.0	-	-	175.2
1991	36.7	44.8	2 856.4	1 029.1	2 026.9	840.8	-	964.6	-	171.0	-	-	182.9
1992	41.0	36.0	3 099.9	1 113.5	1 928.1	909.8	-	1 106.7	-	193.8	-	-	216.3
1993	48.8	32.1	3 536.2	1 221.3	1 804.1	1 055.4	-	1 183.8	-	209.5	-	-	216.6
1994	43.9	30.6	2 821.6	1 364.6	1 958.9	1 166.6	-	1 363.1	-	197.6	-	-	244.5
1995	54.9	37.3	3 097.0	1 549.3	2 019.6	1 274.1	-	1 562.4	103.6	231.2	-	-	270.7
1996	62.3	33.6	2 717.4	1 715.3	2 150.0	1 332.6	-	1 664.6	154.3	246.7	-	-	274.4
1997	65.0	31.3	2 470.5	1 613.5	-	1 444.2	-	1 675.9	164.4	215.0	-	-	267.6
1998	75.3	29.4	2 284.8	1 087.8	1 868.7	1 486.7	-	1 640.7	108.2	169.3	-	-	209.5
1999	84.0	36.0	2 638.9	1 330.0	-	1 489.8	1 263.7	1 664.5	-	184.4	-	-	232.4
2000	94.3	28.5	2 804.1	1 505.2	1 847.4	1 485.7	1 338.7	1 780.8	-	138.0	-	-	-
2001	109.4	40.1	2 516.3	1 378.5	-	1 467.8	1 240.3	1 750.8	-	125.2	-	-	210.2
2002	125.0	23.8	2 413.3	1 593.8	1 860.9	1 419.2	1 202.4	1 764.2	-	150.0	-	-	-
2003	141.3	23.2	2 605.9	1 933.5	-	1 393.4	1 222.8	1 846.6	-	140.8	-	-	229.2
2004	161.2	38.2	2 702.7	2 145.3	2 644.7	1 352.3	1 278.8	1 969.8	-	-	-	-	-
2005	186.9	28.0	2 748.1	2 477.2	-	1 371.6	1 342.6	2 074.7	302.5	-	-	-	252.7
2006	219.6	77.8	2 638.9	2 739.5	3 085.7	1 413.8	1 337.8	2 235.2	391.1	210.6	-	-	-
2007	273.0	-	2 563.9	3 050.5	-	1 458.8	1 352.0	2 498.7	531.4	213.1	-	-	-
2008	350.5	-	2 890.9	2 471.8	-	1 458.1	1 408.5	2 820.6	695.8	-	-	-	-

Note: All data are at current prices.

Source: LABORSTA Internet, <http://laborsta.ilo.org/STP/guest>

Asia's commercial services exports, valued at US\$837 billion, were 12 percent above their 2007 level. Imports also increased by 12 percent, to US\$858 billion.

Compared with the growth rate of world commercial services, Asian performed better in 2008, with a growth rate of 14 percent (See Figure 2.1) and a share of 22.73 percent of total world service trade. (See Figure 2.2)

As Tables 2.7 and 2.8 show, three Asian economies are among the world top ten services exporters for 2008. China and Japan were ranked fifth and sixth, respectively, with about the same export values of US\$146.4 billion, which accounted for 3.9 percent of the world total. India was ranked ninth with US\$102.6 billion in exports, or 2.7 percent of the world total. Among the world top ten services importers, Japan was ranked fourth (US\$167.4 billion, or 4.8 percent of world total import), China was ranked fifth (US\$158.0 billion, or 4.5 percent of world total imports), and Korea was ranked tenth (US\$91.8 billion, or 2.6 percent of world total imports).

Among the three cross-country cooperative organizations in Asia, ASEAN performed well in 2008, with US\$180.1 billion exports and US\$202.6 billion imports in commercial services. The exports of SAPTA amounted to US\$109.1 billion and imports of SAPTA amounted to US\$100.5 billion (See Figures 2.3 and 2.4).

#### 2.1.4 Tourism and the Rise of Chinese Tourists

International travel, for leisure or for business, has been severely affected by the global financial crisis in 2008. Quarterly data show that world travel receipts were buoyant in the first two quarters of 2008, 20 percent higher than that in 2007. The growth rate has been declining since the third quarter, and in the last quarter of the year it declined by 9 percent. World travel exports dropped by 18 percent in the first quarter of 2009.

In the second half of 2008, Asia witnessed a drop of 3 percent in the tourism industry. Asia was hit by the recession hard, since it had enjoyed a double digit growth in 2007. However, some destinations (e.g. Korea) did exceptionally well despite the crisis. From early 2009, all regions had been severely affected by the financial crisis. In Asia, Thailand's exports decreased by 26 percent, while in Australia the decline was 18 percent. The outlook for the travel sector in 2009 as a whole is bleak. In addition to the adverse economic conditions, the

growing fear of the influenza pandemic A (H1N1) might have negative impact on international travel. The World Tourism Organization (UNWTO) forecasts a global decline of 4 to 6 percent of international tourist arrivals in 2009.

The tourism industry is often advocated as a green sector and an important sector for employment growth. It is one of the world's largest and fastest-growing industries. The international tourist receipts are expected to grow by an average of 2.4 percent annually over the next five years despite the global financial crisis. In 2008, there were 924 million tourist arrivals worldwide. According to the UNWTO, international tourist arrivals for business, leisure and other purposes were estimated to decline worldwide by 4 percent in 2009 to 880 million. This represents a slight improvement on the previous estimate as a result of the 2 percent upswing in the last quarter of 2009. In contrast, international tourist arrivals shrank by 10 percent, 7 percent, and 2 percent in the first three quarters, respectively. Asia and the Pacific and the Middle East led the recovery with growth already turning positive in both regions in the second half of 2009. UNWTO forecasted a growth in international tourist arrivals of between 3 percent and 4 percent in 2010. (See Figure 2.5)

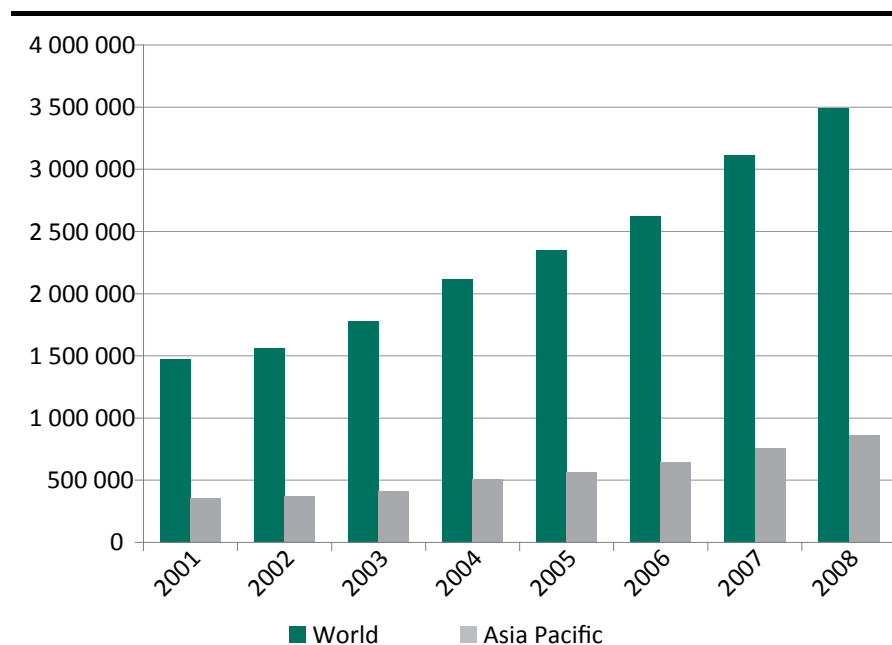
As one of the priority sectors for ASEAN integration, ASEAN tourism in 2008 continued to expand, despite the negative shocks of the global financial crisis in 2008 and the political situation in some ASEAN member states. ASEAN attracted more than 65 million tourists by the end of 2008 with a year-on-year increase of more than 5.1 percent compared with that in 2007 and received more than US\$59 billion. In 2009, ASEAN Tourism Ministers agreed to focus on intra-ASEAN travel and declared 2009/10 as the Youth Travellers' Year. The Ministers also reaffirmed their commitment to accelerating the integration process and endorsed the initiative of the ASEAN NTOs to formulate the ASEAN Tourism Strategic Plan 2011-2015 as the successor of the Road-map for Integration of Tourism Sector (RITS) 2004-2010.

Table 2.9 shows that in travel services, China is both the leading exporter and importer in Asia. In 2008, China's export in travel services amounted to US\$40.84 billion and China's import in travel services was US\$36.16 billion, with a surplus of US\$4.69 billion. The surplus between China's export and import in travel services has



**Figure 2.1 Growth Rates of Commercial Services Exports in Asia, 1990-2008(%)**

Source: WTO Trade Statistics Data



**Figure 2.2 Trade Flow in Commercial Services in Asia (US Million Dollars)**

Source: WTO Trade Statistics Data



**Table 2.7 Leading Exporters in Trade in Commercial Services in Asia, 2008**  
(US Billion Dollars and %)

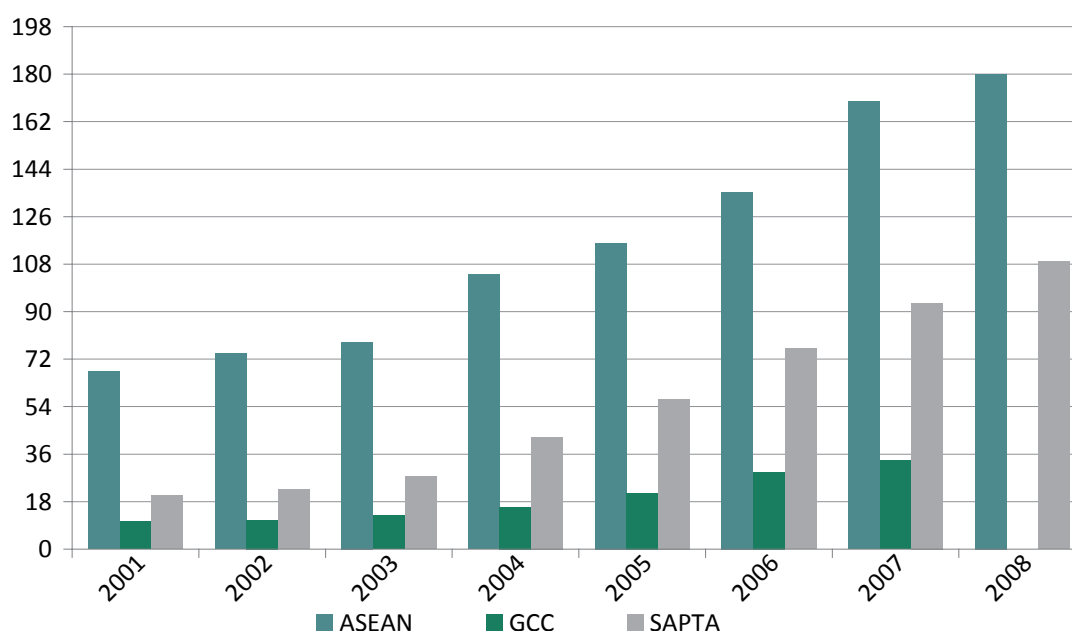
Asia Rank	World Rank	Exporters	Value	Share	Annual Percentage Change
1	5	China, People's Republic of	146.4	3.9	20
2	6	Japan	146.4	3.9	15
3	9	India	102.6	2.7	17
4	12	Hong Kong,China	92.3	2.4	9
5	14	Singapore	82.9	2.2	3
6	16	Korea, Republic of	74.1	2	20
7	22	Russian Federation	50.7	1.3	30
8	24	Australia	45.6	1.2	15
9	28	Taipei,China	33.6	0.9	8
10	29	Thailand	33.4	0.9	11
11	30	Malaysia	29.3	0.8	4
12	35	Israel	23.8	0.6	13
13	38	Lebanon	18.9	0.5	46
14	40	Macao, China	18.1	0.5	25
		Total of Above	959.8	25.4	-
		World	3 780	100	12

Source: WTO Trade Statistics Data

**Table 2.8 Leading Importers in Trade in Commercial Services in Asia, 2008**  
(US Billion Dollars and %)

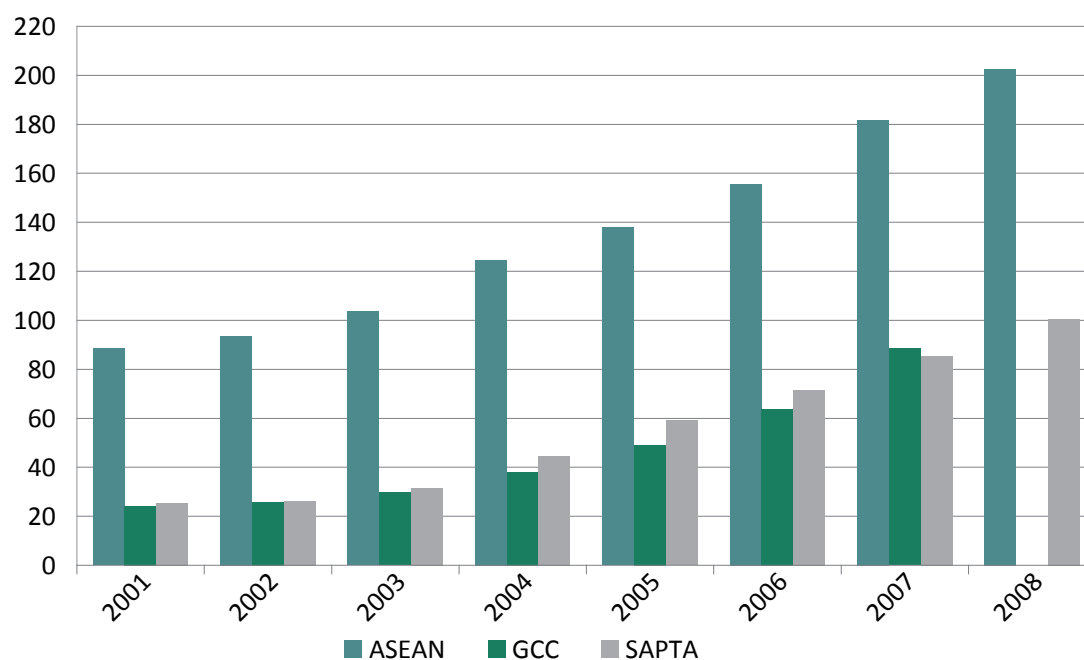
Asia Rank	World Rank	Importers	Value	Share	Annual Percentage Change
1	4	Japan	167.4	4.8	13
2	5	China, People's Republic of	158	4.5	22
3	10	Korea, Republic of	91.8	2.6	12
4	13	India	83.6	2.4	18
5	15	Singapore	78.9	2.3	6
6	16	Russian Federation	74.6	2.1	29
7	19	Thailand	46.3	1.3	21
8	20	Hong Kong,China	45.8	1.3	8
9	21	Australia	45.5	1.3	18
10	24	United Arab Emirates	42.8	1.2	28
11	28	Saudi Arabia	34.6	1	-
12	29	Taipei,China	33.6	1	-2
13	31	Malaysia	29.1	0.8	5
14	32	Indonesia	27.9	0.8	-
15	36	Israel	19.6	0.6	11
		Total of Above	979.5	28	-
		World	3490	100	12

Source: WTO Trade Statistics Data



**Figure 2.3 Exports of Commercial Services of RTAs in Asia (US Billion Dollars)**

Source: WTO Trade Statistics Data



**Figure 2.4 Imports of Commercial Services of RTAs in Asia (US Billion Dollars)**

Source: WTO Trade Statistics Data

decreased in recent year, with the increase in the number of Chinese outbound tourists, as shown in Figure 2.6.

For China, the outbound tourism has grown more rapidly than inbound tourism. Figure 2.7 shows that the total number of outbound travelers grew by about 12 percent during 2004-2008 to 45 Million visitors in 2008. The global financial crisis hurt inbound travel, but did not much affect China's outbound tourism. There were 45.8 million outbound tourists from China in 2008, up 11.9 percent from 2007. The appreciation of the renminbi (yuan), which led to a rise in the purchasing power of the currency, certainly had encouraged such rise in outbound tourism in China.

Statistics shows that China remains Asia's largest source of outbound tourists. Up to the end of 2008, China had approved 137 outbound tourist destinations. East Asia and South Asia account for more than half of the country's outbound tourist markets, with Japan and Korea taking up about 30 percent of the total. (See Table 2.10) The increase in the outbound tourist destinations had played an active role in promoting China's bilateral and multilateral relations with other countries and

regions, especially ASEAN economies.

## 2.2 Foreign Direct Investment

### 2.2.1 Inflows of Direct Investment Declined

The Asia-Pacific region has become one of the hottest destination places for international investment funds. These funds hire local workers, and make products for local and overseas consumption. In addition to the positive employment and production effects, foreign investment funds could also have positive impacts on the growth of these receiving economies, through the provision of scarce physical capital and transfer of technology to local firms. For many economies in Asia, inward direct investment has been a very important factor of growth.

Many Asian countries/economies had long been favorite destinations for international investment funds. The global financial crisis, however, severely hurt international physical capital flows. Table 2.11 presents the value of foreign direct investment inflows to the world and some of the Asian countries/economies from 2000 to 2009. It is shown that foreign direct investment has been rising steadily, until the outbreak of the global financial crisis in the



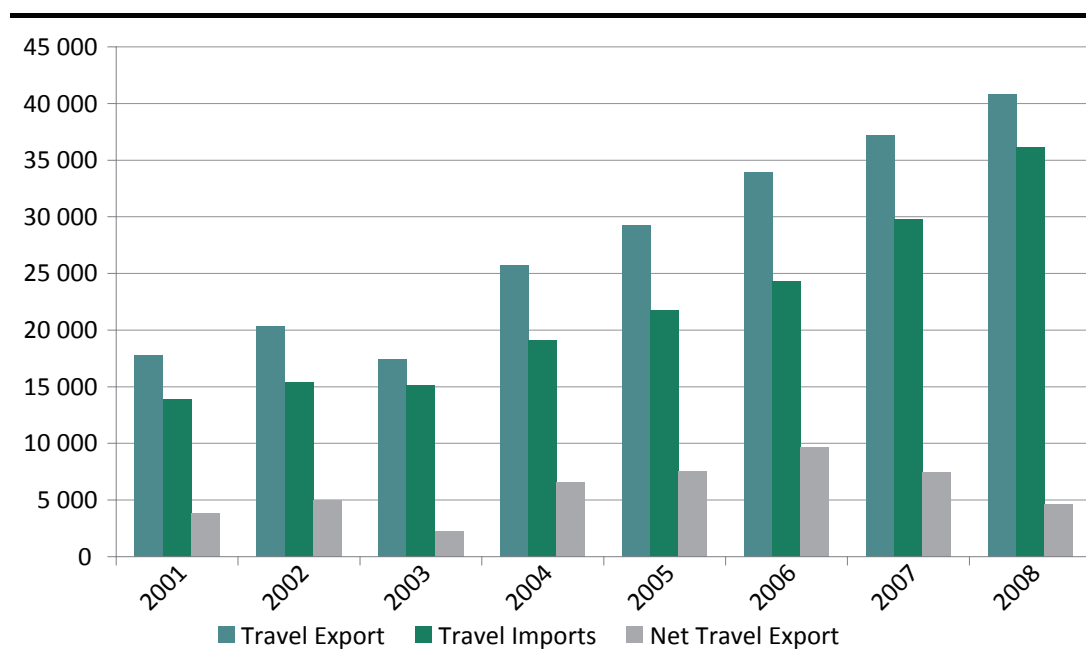
**Figure 2.5 International Tourist Arrivals, 2001-2009 (Million Persons)**

Source: UNWTO *World Tourism Barometer* January 2010 - Vol 8, Issue 1

**Table 2.9 Leading Exporters and Importers of Travel Services in Asia, 2008**  
(US Billion Dollars and %)

	Value	Share		Annual Percentage Change			
	2008	2000	2008	2000-2008	2006	2007	2008
<b>Exporters</b>							
China, People's Republic of	40.8	3.4	4.3	12	16	10	10
Australia	25.2	2	2.6	13	6	25	12
Thailand	17.6	1.6	1.9	11	40	24	6
Macao, China	17.4	0.6	1.8	25	23	38	28
Hong Kong,China	15.2	1.2	1.6	13	13	18	10
Malaysia	14	1.1	1.5	14	18	24	8
Russian Federation	11.9	0.7	1.3	17	30	26	24
India	11.8	0.7	1.2	17	15	24	10
<b>Importers</b>							
China, People's Republic of	36.2	3	4.2	14	12	22	21
Japan	27.9	5.4	3.3	2	-2	-1	5
Russian Federation	24.9	2.1	2.9	14	5	22	12
Korea, Republic of	17.1	1.7	2	12	22	17	-22
Australia	15.9	1.5	1.9	12	4	22	12
Hong Kong,China	15.9	2.9	1.9	3	6	7	6
Singapore	14.2	1.1	1.7	15	10	12	14
United Arab Emirates	13.3	0.7	1.6	20	43	28	18
India	9.6	0.6	1.1	17	11	20	17

Source: WTO Trade Statistics Data



**Figure 2.6 Trade in Travel Services of China, People's Republic of (US Million Dollars)**

Source: WTO Trade Statistics Data

second half of 2008. In that year, direct investment inflow in the world dropped by 14.2 percent.

Different economies in Asia showed different degrees of competitiveness in attracting foreign direct investment. Hong Kong, China is one of the hottest places for foreign capital, although much of the capital may ultimately flow to other places such as the Mainland of China. The dampening effect of the global financial crisis on investment inflows was not evident in 2008, but in 2009, the inflow dropped by 42.9 percent. China is also a very attractive place for foreign capital. Recently, it had surpassed Hong Kong, China in terms of being a destination for foreign capital. It is now the largest recipient country of foreign direct investment. The global financial crisis did not have much negative impact on inward direct investment: The inflows rose by 29.7 percent in 2008, and in 2009, there was a mere drop by 2.6 percent. India is another favorite destination for foreign investors. In 2008, it still registered a rise in the inflow of investment by 65.6 percent, although in 2009 the figure dropped by 19.2 percent. Note that most of the foreign capital inflows went to East Asia, especially to the mainland of China, Hong Kong, China, Singapore, Korea, and Japan. Recently, with the rise of India as an attractive destination, an increasing share of foreign capital inflows went to South Asia.

The fact that the Asia economies were not able to avoid a decline in FDI inflows was mainly due to their heavy dependence on export. Many FDI projects have been export-oriented. Facing the global financial crisis, the export demand from developed economies dropped abruptly, which in turn reduced the confidence of investors in setting up new FDI projects. Even China, which was able to maintain a high growth rate, saw a modest decline in inward FDI in 2009. It was reported that in the second half of the year, inward FDI to many Asian economies recovered quite rapidly, almost offsetting the steep fall in the first half of the year. India, another emerging economy in the region, did not recover so well in terms of receiving foreign investment funds, as its FDI inflow was cut by around 20 percent in 2009.

### 2.2.2 M&As Most Affected

Among all modes of entry, global cross-border mergers and acquisitions (M&As) were the most affected by the global financial crisis. The M&A value for the world dropped by 32 percent in 2008, and went down further by another 66 percent

in 2009. Such declines of M&A were far greater than those of inward FDI, implying that greenfield investment in the world was less affected. In other words, M&A direct investment tends to be much more volatile than greenfield investment. Another feature about M&A investment is that the share of M&A investment in the total direct investment tends to be much higher in developed countries than in developing countries. This feature is shown in Table 2.12. For example, in 2008, the average M&A share in developed economies was 60 percent, while the developing group's average was only 16.8 percent. In addition to the stage of development, government policies and factors such as history, culture, language, and law could also play important roles in determining the M&A share. In Asia, Singapore had the high M&A share of 62.5 percent in 2008, and China had the lowest share, or 6 percent.

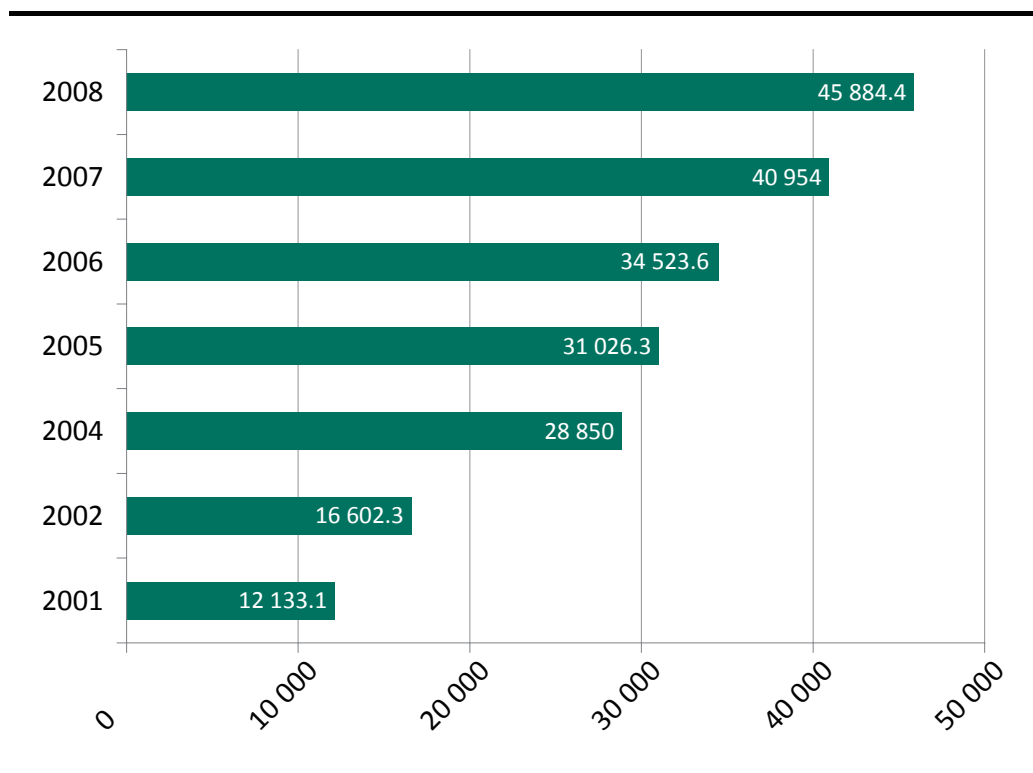
Table 2.13 shows the outflows of FDI in 2000 to 2008. Outward FDI rose for the world in this period, but the rise in Asia was even more impressive. When the outward FDI in the world increased from US\$1231.6 billion in 2000 to US\$1857.7 billion in 2008, with an average annual growth rate of 5.3 percent, outward FDI from East Asia grew from US\$105.1 billion in 2000 to US\$285.0 billion in 2008, or an average annual growth rate of 13.3 percent. Note that most of the outward FDI in Asia came from East Asia, with Japan, Hong Kong, China, and the mainland of China as the main sources. The rise of outward FDI from China was even more significant. While its levels were fairly low until sometime in 2006, in 2008, China sent out more than twice FDI as what it did the year before. India has also been sending out more and more FDI to other countries; for example, the outward FDI from India in 2008 was US\$17.7 billion, as compared with only US\$ 0.5 billion in 2000. See also Table 2.14 for the change in the ratio of M&A purchases to FDI outflow.

The global financial crisis seemed to hurt the world outward FDI more than what it did to the outward FDI from East Asia: in 2008, the world had a drop in outward FDI by 13.5 percent, but East Asia still had a growth of outward FDI by 30.5 percent. Many countries still sent much more FDI out than what they did in 2007, notably China (132.1 percent), Australia (113.8 percent), Japan (74.1 percent), and Thailand (52.7 percent). Some countries, however, experienced a substantial drop

in outward FDI; for example, New Zealand (-96.9 percent), the Philippines (-93.1 percent), Singapore (-63.5 percent), Bangladesh (-57.1 percent), and Pakistan (-53.1 percent).

With the impressive growth of the Chinese economy and the rise in China's purchasing power in the world markets, China's ability and decision to send out investment funds to other economies had drawn a lot of attention. Table 2.15 presents

China's major foreign acquisitions in 2009, including those successful and unsuccessful ones, and those in process. As shown by the table, China's foreign acquisitions concentrated a lot on the energy sectors and heavy industries. This is due to China's great demand for energy resources such as oil and coal. Metallic raw materials are also an overseas resource that China is actively seeking.



**Figure 2.7 The Number of Outbound Chinese Tourists (Thousand Persons)**

Source: National Tourism Administration of PRC

**Table 2.10 The Number of Chinese Outbound Tourists by Destinations, 2008**

Main Destination	Number (1,000)	Growth Rate (%)	Share (%)
Total	45 884.4	11.94	100.00
Hong Kong,China	17 557	8.80	38.29
Macao, China	15 521.7	21.55	33.85
Japan	1 556.5	6.75	3.39
Vietnam	1 459.00	58.54	3.18
Korea, Republic of	1 374.30	4.70	2.99
Russian Federation	789.90	7.60	1.72
Singapore	712.60	10.04	1.55
Thailand	622.60	-12.97	1.35
Malaysia	622.60	8.57	1.35
Australia	413.10	3.69	0.90
Taipei,China	27.89	21.34	0.60

Source: National Tourism Administration of PRC

**Table 2.11 Asia's Foreign Direct Investment Inflow, 2000–2009 (US Billion Dollars)**

	2000	2005	2006	2007	2008	Growth Rate (%)	2009 <sup>a</sup>	Growth Rate (%)
World	1 381.7	973.3	1461.1	1 978.8	1 697.4	-14.2	1 040.3	-38.7
A. East Asia	143.0	155.4	171.1	232.5	263.2	13.2	-	-
Brunei Darussalam	1.0	0.3	0.4	0.3	0.2	-33.3	-	-
Cambodia	0.0	0.4	0.5	0.9	0.8	-11.1	-	-
Indonesia	-4.0	8.3	4.9	6.9	7.9	14.0	5.1	-35.4
Lao PDR	0.0	0.0	0.2	0.3	0.2	-33.3	-	-
Malaysia	4.0	4.1	6.1	8.4	8.1	-3.6	2.7	-66.7
Myanmar	0.0	0.2	0.4	0.3	0.3	0.0	-	-
Philippines	2.0	1.9	2.9	2.9	1.5	-48.3	-	-
Singapore	16.0	14.4	27.7	31.6	22.7	-28.1	18.3	-19.4
Thailand	3.0	8.0	9.5	11.2	10.1	-10.1	4.6	-54.5
Vietnam	1.0	2.0	2.4	6.7	8.1	20.9	-	-
China, People's Republic of	41.0	72.4	72.7	83.5	108.3	29.7	90.0 <sup>b</sup>	-2.6
Hong Kong, China	62.0	33.6	45.1	54.4	63.0	15.9	36.0	-42.9
Japan	8.0	2.7	-6.5	22.5	24.4	8.4	11.4	-53.3
Korea, Republic of	9.0	7.1	4.9	2.6	7.6	189.3	-	-
B. South Asia	5.0	10.9	25.9	32.0	48.9	52.7	-	-
Bangladesh	1.0	0.8	0.8	0.7	1.1	57.1	-	-
India	4.0	7.6	20.3	25.1	41.6	65.6	33.6	-19.2
Nepal	0.0	0.0	0.0	0.0	0.0	0.0	-	-
Pakistan	0.0	2.2	4.3	5.6	5.4	-3.6	-	-
Sri Lanka	0.0	0.3	0.5	0.6	0.8	33.3	-	-
C. Central Asia	1.0	2.6	7.9	13.6	17.5	28.7	-	-
Kazakhstan	1.0	2.0	6.3	11.1	14.5	30.6	-	-
Kyrgyz Republic	0.0	0.0	0.2	0.2	0.2	0.0	-	-
Mongolia	0.0	0.2	0.2	0.4	0.7	75.0	-	-
Tajikistan	0.0	0.0	0.3	0.4	0.4	0.0	-	-
Turkmenistan	0.0	0.4	0.7	0.8	0.8	0.0	-	-
Uzbekistan	0.0	0.0	0.2	0.7	0.9	28.6	-	-
D. Pacific	15.0	-30.4	35.7	46.8	48.8	4.2	-	-
Australia	14.0	-32.1	27.9	44.3	46.8	5.5	-	-
New Zealand	1.0	1.7	7.8	2.5	2.0	-20.0	-	-
E. Middle East	5.0	5.8	16.4	10.7	11.1	3.7	-	-
Israel	5.0	4.9	14.8	9.0	9.6	6.7	-	-
Iran, Islamic Republic of	0.0	0.9	1.6	1.7	1.5	-11.8	-	-
Total	169.0	144.3	257.0	335.7	389.5	16.0	-	-

Notes: Lao PDR = Lao People's Democratic Republic; - = Not available; 0.0 = below 0.1 billion.

a: Preliminary estimates;

b: Not including finance; FDI inflow into China in 2008 not include finance is US\$ 92.4 billion.

Source: UNCTAD, FDI/TNC database, Global Investment Trends Monitor, 19 January 2010.

**Table 2.12 M&A Sales/FDI Inflow Ratio in Selected Regions/Economies**

Region/Economy	Net Cross-border M&A Sales (US\$ Billion)					M&As/FDI Inflow (%)		
	2007	2008	Growth Rate(%)	2009	Growth Rate(%)	2007	2008	2009
World	1031.1	706.5	-31.5	239.9	-66.0	52.1	41.6	23.1
Developed economies	903.4	581.4	-35.6	195.4	-66.4	66.5	60.4	34.5
Japan	16.1	9.3	-42.3	-5.9	-163.5	71.6	38.1	-51.8
Developing economies	97.0	104.8	8.0	37.7	-64.0	18.3	16.9	9.3
Asia and Oceania	68.5	68.2	-0.5	36.5	-46.5	20.6	17.5	13.8
West Asia	23.0	16.3	-29.1	2.3	-85.9	29.6	18.1	4.5
South, East and South-East Asia	45.3	52.6	16.0	34.1	-35.1	17.9	17.7	16.8
China, People's Republic of	9.3	5.4	-41.8	11.2	108.5	11.1	5.8	12.4
Hong Kong,China	7.0	8.7	25.0	2.1	-75.3	12.8	13.8	5.8
India	4.4	10.4	136.0	6.2	-40.5	17.5	25.0	18.5
Indonesia	1.7	2.1	23.2	1.3	-34.9	24.6	26.6	25.5
Malaysia	3.9	2.8	-28.7	0.2	-93.0	46.7	34.6	7.4
Singapore	7.4	14.2	91.3	9.7	-32.1	23.5	62.6	53.0
Thailand	2.4	0.1	-95.8	0.3	142.4	21.1	1.0	6.5

**Note:** Net cross-border M&A sales in a host economy = Sales of companies in the host economy to foreign TNCs (-) Sales of foreign affiliates in the host economy

**Source:** UNCTAD, *World Investment Report 2009*, Global Investment Trends Monitor, 19 January 2010

**Table 2.13 Asia's Foreign Direct Investment Outflow, 2000–2008**  
(US Billion Dollars)

	2000	2005	2006	2007	2008	Growth Rate(%)
World	1231.6	879.0	1396.9	2146.5	1857.7	-13.5
A. East Asia	105.1	107.6	147.8	218.5	285.0	30.5
Brunei Darussalam	0.0	0.0	0.0	0.0	0.0	-10.5
Cambodia	0.0	0.0	0.0	0.0	0.0	0.0
Indonesia	0.2	3.1	2.7	4.7	5.9	26.2
Lao PDR	0.0	0.0	0.0	0.0	0.0	0.0
Malaysia	2.0	3.0	6.1	11.1	14.1	26.8
Myanmar	0.0	0.0	0.0	0.0	0.0	0.0
Philippines	0.1	0.2	0.1	3.4	0.2	-93.1
Singapore	5.9	11.2	13.3	24.5	8.9	-63.5
Thailand	0.0	0.5	1.0	1.9	2.8	52.7
Vietnam	0.0	0.1	0.1	0.2	0.1	-33.3
China, People's Republic of	0.9	12.3	21.2	22.5	52.2	132.1
Hong Kong,China	59.4	27.2	45.0	61.1	59.9	-2.0
Japan	31.6	45.8	50.3	73.5	128.0	74.1
Korea, Republic of	5.0	4.3	8.1	15.6	12.8	-18.1
B. South Asia	0.5	3.1	14.5	17.5	17.8	1.8
Bangladesh	0.0	0.0	0.0	0.0	0.0	-57.1
India	0.5	3.0	14.3	17.3	17.7	2.3
Nepal	0.0	0.0	0.0	0.0	0.0	0.0
Pakistan	0.0	0.0	0.1	0.1	0.0	-53.1
Sri Lanka	0.0	0.0	0.0	0.1	0.1	-34.7



	2000	2005	2006	2007	2008	Growth Rate(%)
C. Central Asia	0.0	-0.1	-0.4	3.2	3.8	21.0
Kazakhstan	0.0	-0.1	-0.4	3.2	3.8	21.0
Kyrgyz Republic	0.0	0.0	0.0	0.0	0.0	0.0
Mongolia	0.0	0.0	0.0	0.0	0.0	0.0
Tajikistan	0.0	0.0	0.0	0.0	0.0	0.0
Turkmenistan	0.0	0.0	0.0	0.0	0.0	0.0
Uzbekistan	0.0	0.0	0.0	0.0	0.0	0.0
D. Pacific	3.8	-39.2	23.9	20.0	36.0	79.8
Australia	3.2	-38.1	23.4	16.8	35.9	113.8
New Zealand	0.6	-1.1	0.5	3.2	0.1	-96.9
E. Middle East	3.3	3.4	15.3	7.3	8.2	38.3
Israel	3.3	3.0	14.9	7.0	7.9	12.5
Iran, Islamic Republic of	0.0	0.5	0.4	0.3	0.4	25.8
Total	112.7	74.7	201.2	266.4	350.9	31.7

Note: Lao PDR = Lao People's Democratic Republic; 0.0: below 0.1 billion

Source: UNCTAD, FDI/TNC database

**Table 2.14 M&A Purchases/FDI Outflow Ratio in Selected Regions/Economies**

Region/Economy	Net Cross-border M&A Purchases (US\$ Billion)					M&As/FDI Outflow (%)		
	2007	2008	Growth Rate (%)	2008 H1	2009 H1	Growth Rate (%)	2007	2008
World	1 031.1	706.5	-31.5	621.3	123.2	-80.2	48.0	38.0
Developed economies	842.0	539.6	-35.9	504.0	99.9	-80.2	46.5	35.8
Japan	30.4	54.1	78.0	24.5	8.9	-63.9	41.3	42.2
Developing economies	139.7	99.8	-28.5	97.2	16.9	-82.6	48.9	34.1
Asia and Oceania	91.3	89.0	-2.5	76.7	17.5	-77.2	40.9	40.4
West Asia	37.1	20.5	-44.7	23.4	8.7	-63.1	76.7	60.9
South, East and South-East Asia	54.2	68.8	26.9	53.2	8.7	-83.7	31.0	36.9
China, People's Republic of	-2.4	36.9	-1643.6	26.5	1.6	-94.1	-10.6	70.7
Hong Kong, China	-8.0	-1.2	-85.3	2.8	0.4	-84.4	-13.1	-2.0
India	29.1	11.7	-59.9	8.6	0.2	-97.2	168.3	65.9
Indonesia	0.8	0.9	10.5	0.2	0.2	-15.9	17.7	15.5
Malaysia	3.7	9.8	166.8	1.9	3.0	55.7	33.0	69.4
Singapore	23.9	6.6	-72.3	6.8	1.9	-72.2	97.7	74.2
Thailand	0.1	1.4	2420.4	..	0.8	..	2.9	48.0

Notes: H = half year; .. = Not available. Net cross-border M&A purchases by a home economy = Purchases of companies abroad by home-based TNCs (-) Sales of foreign affiliates of home-based TNCs

Source: UNCTAD, *World Investment Report 2008*, 2009

**Table 2.15 China's Foreign Acquisitions, 2009**

	Company	Sector	Country	Amount	Target
I. Successful acquisitions					
Apr. 09	CNPC, PetroChina	Oil/Gas	Kazakhstan	3.3	Kazmunajgaz
May. 09	PetroChina	Oil	Singapore	1	Singapore Petroleum, 45.5 percent
May. 09	Minmetals	Metals	Australia	0.9	OZ Minerals
Jun. 09	Sinopec	Oil	Switzerland	7.2	Addax Petroleum
Jul. 09	CNPC & Sinopec	Oil	Angola	1.3	Marathon Oils' field
Aug. 09	Yanzhou Coal	Coal	Australia	2.9	Felix Resources
Sep. 09	CIC	Oil/Gas	Kazakhstan	0.9	Kazmunajgaz
Oct. 09	Jein Jein Nickel	Metals	Canada	2	Canadian Royalties
Oct. 09	CIC	Oil	Russia	0.3	45 percent stake in Nobel Oil
Oct. 09	PetroChina	Oil	Canada	2	Athabasca oil sands
Nov. 09	CNOOC	Oil	US	0.1	Norway Statoil's 20 of 451 drilling leases
Nov. 09	Baosteel Group	Metals	Australia	0.3	Aquila
Dec. 09	Xi'an Aircraft Industry Group, ATL	Manufacture	Austria	0.1	FACC, 91.25 percent
II. Acquisitions in process					
Sep. 09	Chinalco	Aluminum	Russia		A stake in UC Rusal, world's largest producer
Oct. 09	CNOOC	Oil	Nigeria		Offshore oil fields
III. Unsuccessful acquisitions					
Dec. 09	Sinachem	petrochemical	Australia	2.3	Nufarm
Oct. 09	China Nonferrous Metals	Rare minerals	Australia		Australia requested stake in Lynas be cut below 50 percent
Sep. 09	CNOOC	Oil	Nigeria	4	Kosmos stake in oil field
June, 09	Chinalco	metals	Australia	19.5	Rio Tinto

Sources: World Bank, www.people.com.cn

### 2.2.3 Investment into China: Diversion or Facilitating?

In recent years, various Asian economies have become very popular destinations for direct investment flows. For the host economies, foreign direct investment brings in technology, management know-how, and much needed capital. In addition, there is now increasing evidence that foreign direct investment facilitates all forms of intra-regional trade and enhances Asian integration.

As China is now the largest recipient of foreign investment among Asian economies, some other Asian countries had expressed a concern about the potential "investment-diversion" effects. In other words, is China's rise as an important destination for foreign investment funds at the expense of other Asian countries?

There are two sets of arguments that we should consider. First, in examining which low-

wage export platform to locate, multinationals may choose between investing in China versus investing in another Asian economy, e.g. Thailand or Indonesia. In this case, multinationals will study the whole host of factors, including wage rates, political risks, infrastructure, etc. These characteristics tend to make a country more desirable as a site for low-cost production. Investing in China will then reduce the amount of investment into another Asian economy. We can call this the "investment-reducing" effect.

The second set of arguments is the production and resource linkages between a growing China and the rest of Asia. In manufacturing, this takes the form of further vertical specialization and growing fragmentation of the production process. Multinational corporations set up factories in China and also in Malaysia (for example) to take advantage of their respective competitiveness in distinct stages of production. Components and parts are then

traded among China and other Asian economies. An increase in China's foreign direct investment is then related positively to an increase in Malaysian foreign direct investment.

A somewhat different but complementary argument is that as the economy of China grows, its domestic market size increases and its appetite for minerals and resources also rises. Subsequently, foreign-invested firms rush into China to produce in China and to sell their products and services in China. In addition, other multinationals also invest in other parts of Asia in order to increase extraction of minerals and resources to export to China and to feed China's industrialization. China needs a whole spectrum of raw materials. The commodities include copper, steel, aluminum, petroleum, coal, etc. We can call this effect the "investment-augmenting effect". Theoretically we cannot accurately predict the possible net impact of the investment-augmenting effect and the investment-reducing effect for China.

In recent years, there is a growing literature empirically studying the "China Effect". Chantasawat, Fung, Iizaka and Siu (2008a, 2008b) show that in general, foreign direct investment flowing into China is complementary to foreign direct investment flowing into eight other East and Southeast Asia economies. The economies included in the studies are Hong Kong, China, Singapore, Taipei, China, Korea, Thailand, Malaysia, the Philippines and Indonesia. In these studies, the investment-augmenting effect is shown to be empirically stronger than the investment-diverting effect. Using a gravity model, Eichengreen and Tong (2007) also show that foreign direct investment flowing into China is positively related with foreign direct investment flowing into other Asian economies. Mercereau (2005) finds that there is little substitution between foreign direct investment going into China and foreign direct investment going to other Asian destinations, with the exceptions of Singapore and Myanmar. Cravino, Lederman, Olarreaga (2006) also find that there is no net investment diversion. Overall, in terms of attracting foreign direct investment, the Asian economies are found to be complementary destinations. Foreign direct investment thus further deepens Asian integration. The economic rise of China actually increases foreign direct investment into other Asian host economies.

Another development in the area of investment

flows that have caught the attention of policymakers is the increased outflows of foreign direct investment from developing Asian countries, particularly India and China. There have been several well-publicized overseas acquisitions by Chinese companies. For example, in December 2004, the Lenovo Group purchased the personal computer unit of IBM for US\$1.25 billion. In June and December 2007, China Investment Corporation purchased shares from the Blackstone Group and acquired 9.9 percent of Morgan Stanley, respectively. Despite such increases in purchased assets abroad, there are indications that the future outflows from both China and India will likely increase at an even more robust pace.

Historically, other Asian economies such as Japan, Korea, and Taipei, China had also invested abroad as their economies took off. Is China's current overseas investment different from these Asian investing economies? A recent study by Fung, Garcia-Herrero and Siu (2009) shows that at least up till now, the investment outflows of China are not too different from the direct investment outflows from Japan, Korea and Taipei, China. At various times, economic analysts have argued that these Asian economies invested abroad for a variety of purposes such as seeking markets, acquiring natural resources and food, facilitating international trade and obtaining better technology. These motives are now being discussed as possible reasons explaining the investment outflows of China.



# Chapter 3

## Regional Cooperation and Economic Integration of the Asian Economies

### 3.1 Dramatic Rise of Regional Trade Agreements

A dramatic rise of Regional Trade Agreements (RTAs) became a phenomenal feature in the international trade especially in the past two decades. As of December 2008, WTO reported that there were 421 RTAs notified and 230 of them currently in force, and of these around 80 percent are concluded since late 1990s. Every single WTO member participates in at least one of these RTAs with an exception of Mongolia. Some of Asian countries who have traditionally favored the multilateralism such as Australia, India, Japan, Korea, and Singapore also became very active to form RTAs these days (See

Table 3.1).<sup>1</sup> According to the latest statistics from the Asian Development Bank, as of 2009, there were a total of 221 FTAs in Asia, among which 112 were concluded, 49 proposed, 16 in framework and 44 under negotiation (See Appendix II ).

The Asia-Pacific region was characterized by further proliferation of Regional Trade Agreements (RTAs) and Free Trade Agreements (FTAs). Table 3.1 gives the number of RTAs major economies in Asia and Australia have as of the middle of 2009.<sup>2</sup>

<sup>1</sup> Australia concluded 7 RTAs including the FTA with US signed in 2004. 8 RTAs have been signed up by India so far. Japan notified 11 RTAs to the WTO out of which 4 RTAs (ones with ASEAN, Indonesia, Brunei-Darussalam, and Philippines) came in force in 2008 only and it added 2 more (ones with Switzerland and Vietnam) in 2009. Singapore became one of most popular FTA partners among Asian countries. It involves in 16 RTAs beginning from ASEAN Free Trade Area (AFTA) in 1992, but most of them are concluded in past 10 years. China, Thailand, Korea and Malaysia also have achieved substantial progress in RTAs during such a short period.

<sup>2</sup> For a chronology of the RTAs in Asia, see Appendix I.

**Table 3.1 Number of RTAs in Force of Asian and Australian Economies**

Country/Region	Number of RTAs	Country/Region	Number of RTAs
Afghanistan	1	Macao, China	1
Australia	7	Malaysia	6
Azerbaijan	4	Maldives	2
Bahrain	3	Mongolia	0
Bangladesh	5	Nepal	2
Bhutan	3	Oman	3
China, People's Republic of	8	Pakistan	8
Cyprus	28	Philippines	6
Georgia	8	Qatar	2
Hong Kong, China	1	Russian Federation	7
India	8	Saudi Arabia	2
Indonesia	5	Singapore	16
Iran	2	Sri Lanka	6
Iraq	2	Syrian Arab Republic	3
Israel	7	Taipei, China	2
Japan	11	Tajikistan	4
Jordan	5	Thailand	8
Kazakhstan	8	Turkey	15
Korea, Democratic People's Republic of	1	Turkmenistan	4
Korea, Republic of	6	United Arab Emirates	2
Kuwait	2	Uzbekistan	4
Kyrgyz Republic	9	Vietnam	5
Lao PDR	5	West Bank and Gaza	N/A
Lebanon	3	Yemen, Republic of	1

Source: WTO RTA database.

Table 3.2 depicts the number and structure of various RTAs in the Asia-Pacific region as of mid 2009. Out of a total of 104 RTAs in existence<sup>1</sup> as many as 75 were bilateral, (both within (51 in number) and cross region (24 in number)), 15 were directed at country blocks, 13 were regional and 1 global. There was a preponderance of bilateral

Free Trade Agreements within the region (25) and those cross region followed by bilateral FTA and EIA within the region (17) and cross region (9). Kastner and Kim (2007) model the determinants of bilateral FTAs in Asia and come to the conclusion that the countries belonging to the same multilateral Preferential Trade Agreement (PTA) and countries with a common language are more likely to form RTAs. Similarly, the higher a country's GDP the more likely it is to enter into a bilateral RTA.

<sup>1</sup> *The Economist* (2010) February 6-12 reports that around 230 FTAs involving Asian countries have been signed or proposed.

**Table 3.2 Architecture of RTAs in Asia and the Pacific**

	Bilateral		Country-block		Regional		Global (GSTP)	Total
	Within region	Cross region	Within region	Cross region	Within region	Cross region		
Customs Union	0	0	0	1	1	0	0	2
FTA & EIA	17	9	0	2	0	2	0	30
Free Trade Agreement	25	12	2	1	4	0	0	44
EIA	1	0	1	0	0	0	0	2
Preferential Agreement	4	2	1	0	4	0	1	12
Framework Agreement	2	3	2	5	2	0	0	14
Subtotal	2	3	2	5	2	0	0	104
Total	75		15		13		1	104

**Notes:** 1 “FTA & EIA” stands for Free Trade Agreement and Economic Integration Agreement – a category of agreements that are notified both under goods and services.

2 Includes six agreement between Central Asian countries and members of the Commonwealth of Independent States.

**Source:** ESCAP (2010) Asia Pacific Trade and Investment Report 2009: Trade-led Recovery and Beyond.

Despite the proliferation of RTAs, the regional trade level within the Asia-Pacific region still remains relatively low. Several reasons can be cited for this. First, rules of origin provisions, and the attendant paperwork, in these RTAs are rather complex. Second, tariffs in the region are already quite low. Third, trading within the Asia-Pacific region is concentrated between two blocks: East Asia (China, Japan, and Korea) and Southeast Asia, i.e., the ASEAN nations. Considerable trade occurs across these blocks with China's trade with ASEAN becoming a major force of late.

That said, a considerable portion of the intra-regional trade within and between Southeast and East Asia has recently been characterized by the rapid development of production networks, the so-called “factory Asia” phenomenon. This involves considerable intra-regional production and trade in intermediate goods, parts and components. Countries in the region produce intermediates, parts, and components according to cost advantage and then trade with each other in these products in order to produce final goods for the US and the EU markets. Indeed as much as half of this intra-regional trade consists of trade in such intermediates. The share of final goods is only about 22 percent. Indeed, the final goods made from such processes

are often intended for the markets of the US and the EU. Kim, Lee and Park (2009) infer that once these indirect effects are accounted for almost 60 percent of Asia-Pacific exports are consumed by US, the EU, and Japan. Hence, trade recovery in the short-term in the Asia-Pacific region depends to a significant extent on economic recovery in the US, the EU, and Japan. Over the medium term, however, as relative incomes shift towards the Asia-Pacific region efforts should be made to broaden the scope for free trade within the Asia-Pacific region through aggressive trade liberalization measures. Efforts to create a pan-ASEAN Economic Community by 2015 and the efforts to expand ASEAN to ASEAN+3 or ASEAN+6 should be seen in this light. However, a successful conclusion of the Doha Round of the WTO talks may lower the pace of such integration.

## 3.2 ASEAN+3 and Beyond

### 3.2.1 ASEAN+3 Economic Cooperation

ASEAN Plus Three (APT) is a forum formed by the Association of Southeast Asian Nations and the three East Asian nations of China, Japan, and Korea. It was formed in 1997, partly in response to the turmoil of the financial markets in Asia at that time, which led to the Asian financial crisis.

Since its establishment, APT cooperation has broadened and deepened in 20 areas, including political and security, transnational crime, economic, finance and monetary, agriculture and forestry, energy, minerals, tourism, health, labor, culture and arts, environment, science and technology, information and communication technology, social welfare, rural development and poverty eradication, disaster management, youth, women, and other tracks. The aim to realize the ASEAN Economic Community by 2015 must be impetus for ASEAN states to enhance ATP economic relations while a more integrated Asia, especially East Asia Community, would be a target behind the efforts of the Plus Three countries so far in strengthening this mechanism. However, since the recent global financial crisis has affected APT economies largely through trade, boosting the economic cooperation among these economies for a quick recovery must be what is expected the most from this enhancement by APT states.

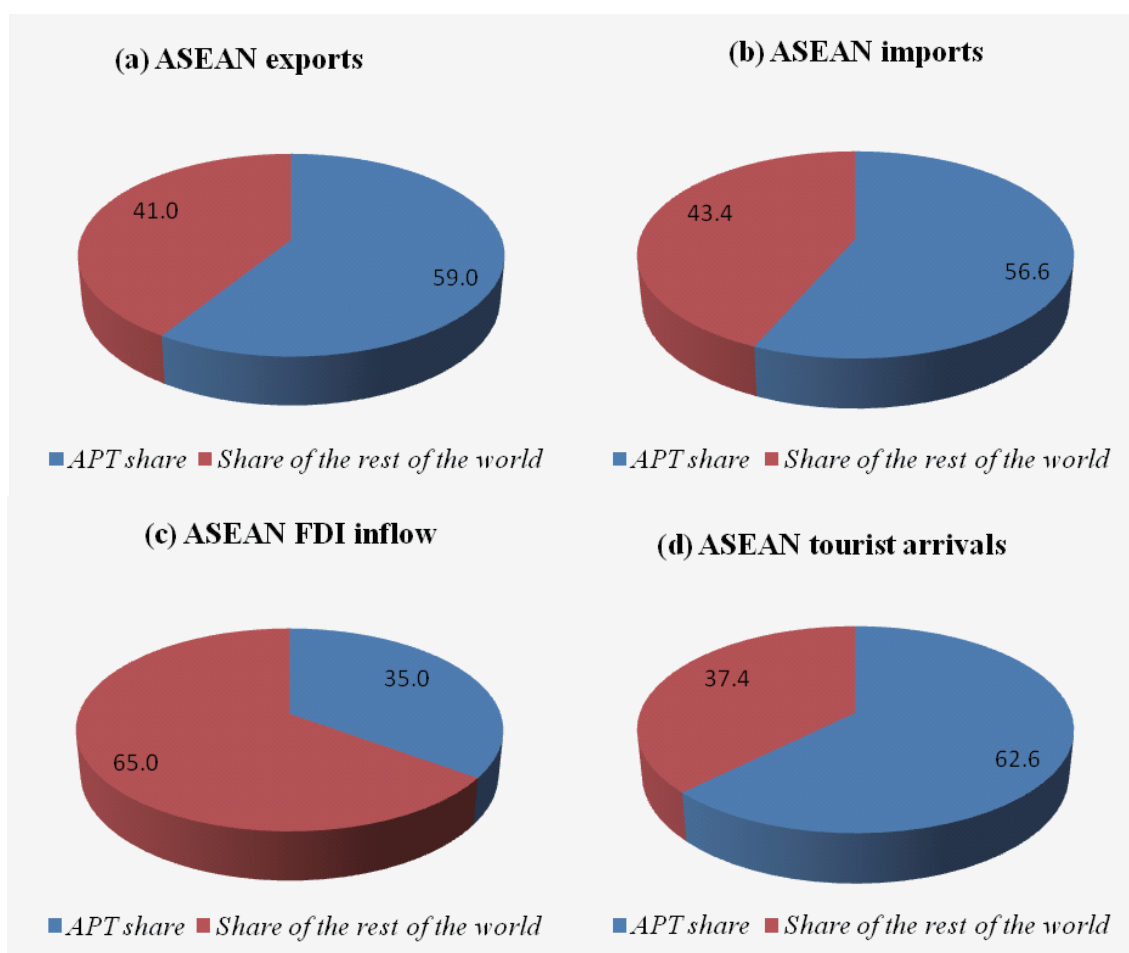
ASEAN Plus Three is the major market for ASEAN trade. About 59 percent of exports and 57 percent of imports of ASEAN in 2008 are shipped to and from ATP economies, of which intra-ASEAN trade accounts for about a half and Plus Three states

for the other half (panels (a) and (b) of Figure 3.1).<sup>1</sup> Total ASEAN exports to the Plus Three countries reached US\$225.4 billion in 2008, an increase of 17.1 percent from 2007. This growth is much faster than that in 2007 when ASEAN exports to these countries grew by 10.9 percent. ASEAN imports from the same countries also increased remarkably in 2008, with a growth of 19.5 percent in 2008, reaching US\$254.7 billion, up from US\$213.1 billion in 2007. Hence, despite the global crisis, total ASEAN trade with the Plus Three countries remained high at US\$480.1 billion in 2008, up by 18.4 percent compared to US\$405.5 billion in 2007, accounting for 28.1 percent share of total ASEAN trade. APT is also a huge source of investment capital and tourist revenue of ASEAN. About 35 percent of investment inflow and 62.6 percent of tourist arrivals of ASEAN are from member states of ATP (panels (c) and (d) of Figure 3.1). However, there is a decrease in foreign direct investment (FDI) from the Plus Three countries to ASEAN, down from US\$12.7 billion in 2007 to US\$10.3 billion in 2008.

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<sup>1</sup> The source of data used in this section is from ASEAN Statistics, available online at the ASEANstat website of this association (<http://www.aseansec.org/22122.htm>)





**Figure 3.1: APT Share in ASEAN Trade, FDI Inflow and Tourist Arrivals, 2008 (%)**

The master plan for recent enhancement of APT relations and cooperation is the ASEAN Plus Three Cooperation Work Plan 2007-2017. This plan supports ASEAN+1 free trade areas (FTAs) or comprehensive economic partnership (CEP) between ASEAN and all Plus Three countries. All the FTAs/CEP cover trade in goods, trade in services, investment, and other areas of economic cooperation. The ASEAN-China FTA has come into effect since January 2010 for ASEAN-6 (Brunei Darussalam, Indonesia, Malaysia, the Philippines, Singapore, and Thailand) and China. The timeline for Cambodia, Lao PDR, Myanmar, and Vietnam (CLMV) is 2015. This is resulted from a series of ASEAN-China negotiation processes under the Framework Agreement on Comprehensive Economic Cooperation signed in 2002. The Agreement on Trade in Goods is being implemented since July

2005, the Agreement on Trade in Services was signed in January 2007 and entered into force in July 2007, and the Investment Agreement was signed in August 2009. This regional trading arrangement is of considerable significance to the global economy owing to the size of these economies as well as the magnitude of trade between them. ASEAN-China FTA is the biggest Free Trade Area between developing countries. As the two sides started engaging with each other more intensively, trade between them rose rapidly, reaching about US\$100 billion in 2005 steadily increased afterward. In 2008, ASEAN-China trade reached US\$192.7 billion, accounting for about 11.3 percent of ASEAN trade, putting China as the third largest partner of ASEAN bloc. (See Table 3.3)

Japan is still the most important economic partner and a major contributor to development

cooperation with ASEAN countries. Japan-ASEAN trade accounts for 12.4 percent of total ASEAN trade in 2008, reaching US\$211.4 billion and making Japan the biggest trading partner of ASEAN. However, FDI flows from Japan declined 8.4 percent from US\$8.3 billion in 2007 to US\$7.7 billion in 2008. With the rise of China, Japan is making efforts to sustain its leadership in the region. Japan completed the signing of the ASEAN-Japan Comprehensive Economic Partnership (AJCEP) in April 2008. The

AJCEP agreement covers trade in goods, trade in services, investment and economic cooperation. Together with actively promoting the concept of an "East Asia Community", Japan expects the AJCEP to strengthen the economic ties between them to keep its leadership. Lao PDR, Myanmar, Singapore, Vietnam and Japan have been implementing this agreement since December 2008, while Brunei Darussalam and Malaysia since January and February 2009, respectively.

**Table 3.3 ASEAN Trade, FDI Inflow and Tourist Arrivals by APT Members and Other Selected Partners, 2008**

	Value				Share to Total			
	Exports	Imports	FDI	Tourist	Exports	Imports	FDI	Tourist Arrivals
ASEAN	242 497.5	215 616.5	10 821.1	30 276.4	27.6	25.9	18.2	46.5
Japan	104 861.6	107 053.9	7 156.8	3 623.8	11.9	12.9	12.0	5.6
China, People's Republic of	85 557.7	107 114.3	1 436.9	4 477.6	9.7	12.9	2.4	6.9
Korea, Republic of	34 938.6	40 541.5	1 411.3	2 389.7	9.7	4.9	2.4	3.7
EU-25	112 886.8	89 471.5	13 124.3	6 764.0	12.8	10.8	22.1	10.4
United States	101 128.5	79 910.5	3 012.5	2 653.3	11.5	9.6	5.1	4.1
Australia	33 681.3	17 907.9	990.5	2 904.5	3.8	4.1	1.7	4.5
India	30 085.8	17 379.3	429.6	1 984.7	3.4	2.1	0.7	3.0
New Zealand	4 161.3	3 263.3	111.7	319.7	0.5	0.4	0.2	0.5

**Notes:** 1 Value in US\$ million for exports, imports and FDI inflow, in thousands for tourists arrivals, share in percent.

2 EU-25 includes Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, and United Kingdom.

**Source:** ASEAN Statistics, ASEANstat website: <http://www.aseansec.org/22122.htm>

Korea has changed its focus to join China and Japan in boosting economic ties with ASEAN. In the early 2000s, the Korea's foreign policy focused on the initiative of "the era of Northeast Asia" with an emphasis on Northeast Asia, together with the Korean peninsula. However, it has gone beyond this concentration and broadened its interest with ASEAN, with the so-called "a new Asia initiative". In November 2004, Korea and ASEAN countries signed the Joint Declaration on Comprehensive Cooperation Partnership, setting a framework for a closer relationship between the two sides, especially economic ties. The Framework Agreement on Comprehensive Economic Cooperation was signed in December 2005. This agreement set the timeline for an ASEAN-Korea Free Trade Area as follows:

2008 for Korea with flexibility to 2010; 2010 for ASEAN-6 with flexibility to 2012; 2016 for Vietnam and 2018 for Cambodia, Laos and Myanmar. Under this framework agreement, the Agreement in Trade and the Agreement in Services between Korea and nine ASEAN countries were signed in August 2006 and November 2007, respectively. Thailand signed these agreements in February 2009. The Investment Agreement between ASEAN and Korea was also signed in June 2009. The Trade in Goods Agreement is being implemented since June 2007 and the Trade in Services Agreement entered into force in May 2009. With the enhanced effort of the two sides, trade and investment between ASEAN and Korea have increased remarkably. Total trade between the two reached US\$75.5 billion, and FDI

capital from Korea was US\$2.1 billion in 2008.

Finance and monetary cooperation must be a focal point in APT economic cooperation. The recent focus is on the implementation of the Chiang Mai Initiative Multilateralization (CMIM). CMIM has a forerunner of Chiang Mai Initiative first initiated in 2000 among Korea, China, and Japan and five major ASEAN countries – Thailand, Malaysia, Indonesia, Singapore, and the Philippines. To help participating states effectively respond to the recent global financial crisis, APT countries, together with Hong Kong, China, agreed in February 2009 to increase the size of CMIM from US\$80 billion to US\$120 billion. In May 2009, the 12th APT Finance Ministers' Meeting reached an agreement on all the main components of the CMIM, including the individual country's contribution, borrowing accessibility, and the surveillance mechanism. The CMIM was officially signed by the finance ministers and central bank governors of the 13 APT countries in December 2009 and will be launched on March 24, 2010. This mechanism will provide financial support through currency swap transactions to CMIM parties facing balance of payments and short-term liquidity difficulties. Participating countries can quickly respond to a liquidity crisis via swapping currencies within seven days of the liquidity support request. The currency swap arrangement will carry a 90-day maturity and the interest rate will be a combined rate of the London Interbank Offered Rate and a fixed spread, and can be extended up to a maximum of seven times, or up to 720 days.

In the 12th APT Finance Ministers' Meeting in May 2009, the establishment of the Credit Guarantee and Investment Mechanism (CGIM) as a trust fund of the Asian Development Bank (ADB) was also endorsed, with an initial capital of US\$500 million. The objective of CGIM is to support the issuance of local currency-denominated corporate bonds in the region. Related to the most recent regional action to the global economic crisis, APT member states get together with the Action Plan to Restore Economic and Financial Stability of the Asian Region in February 2009 and commit to working together to implement the Joint Press Statement on ASEAN+3 Cooperation in Response to the Global Economic and Financial Crisis issued in June 2009.

Besides fostering ASEAN+1 FTAs, the member states are also supporting feasibility study of the East Asia Free Trade Area (EAFTA) and Comprehensive

Economic Partnership in East Asia (CEPEA). Beyond trade, investment, and finance, economic cooperation among APT has also broadened to various fields. In the energy sector, the APT countries called for closer cooperation in building a secure, stable, safe, and sustainable energy future. Energy security, oil market, oil stockpiling, natural gas, and new renewable energy and energy efficiency and conservation are five areas in this sector the APT member states are trying to strengthen in their cooperation. Tourism is also a priority in the context that the APT countries anticipate tourism is seriously vulnerable to the global financial crisis and that boosting tourism in the East Asian region would increase regional growth by one to two percent. An initiative on health tourism has been conducted to enhance collaboration between health and tourism sectors to secure health and safety of travelers and host communities in the region. The APT countries are also continuing their cooperation in food security to foster a sustained economic and social development in the region. East Asia Emergency Rice Reserve (EAERR) Pilot Project is now under implementation aiming to help respond to the humanitarian needs for such emergencies due to disasters. APT is now making effort to transform the EAERR into a permanent mechanism under the ASEAN Plus Three Emergency Rice Reserve (APTERR).

### 3.2.2 Beyond ASEAN+3

Besides Plus Three countries, ASEAN has effective economic cooperation with many other important partners, especially EU and the US. Dialogue relations between ASEAN and EU were formalized in 1977, and later institutionalized by the ASEAN-EEC Cooperation Agreement signed in March 1980. EU is one of ASEAN's major trading partners, with total inter-regional trade of US\$202.5 billion in 2008. Apart from that, EU is a major source of foreign direct investment, peaking at US\$18.4 billion in 2007 before dropping to US\$13.1 billion in 2008 due to the global financial crisis. EU also accounts for the biggest source of ASEAN tourist arrivals, with a share of 10.4 percent in 2008. Trade and investment flows between the two sides are promoted via the Trans-Regional ASEAN-EU Trade Initiatives (TRETI). ASEAN and EU have also started negotiation on the ASEAN-EU FTA since 2007. However, in March 2009 the two sides agreed to take a pause in the negotiations.

With the US, ASEAN has dialogue relations since 1977. Since the early 1990s, the focus in ASEAN-US has changed from political and security

matters to trade and investment, technology transfer and human resources development. ASEAN and the US concluded the Trade and Investment Framework Agreement (TIFA) in August 2006 to strengthen ASEAN-US economic cooperation. In development cooperation, the two sides are currently implementing the framework of ASEAN-US Enhanced Partnership. The total trade volume between ASEAN and the US was US\$178 billion in 2008, an increase from US\$161 billion in 2006. The total US FDI flows to ASEAN amounted to US\$6.3 billion in 2007 and dropped to about US\$3 billion in 2008.

In recent years, ASEAN has also made much effort to intensify its economic cooperation with other partners in the region. Especially, it is currently expanding cooperation in East Asia in a framework of East Asia Summit which includes ASEAN+3 and other 3 dialogue partners, Australia, India, and New Zealand, the so-called ASEAN+6. ASEAN is now developing close relations and partnerships with different countries in various frameworks to strengthen its increasing influence and involvement in the region.

## **3.3 APEC: A Possible Free Trade Area**

### **3.3.1 Background for an FTAAP**

Amid a number of initiatives proposed for building an intra-regional FTA in East Asia, the world's most dynamic economic region, an APEC-wide free trade zone has also been advocated by some scholars, such as Fred Bergsten, former Chair of the Eminent Persons Group of APEC and Director of the Institute for International Economics based in Washington D.C. Finally, at the 14th Economic Leaders' Meeting held in November 2006 in Hanoi, the APEC leaders agreed to undertake studies on a Free Trade Area of the Asia-Pacific (FTAAP). Since then, APEC has continued to examine building blocks towards a possible FTAAP as "a long-term prospect". These include simulation studies, which have illustrated the possible economic benefits of and challenges in establishing an FTAAP; the updated inventory of issues that would need to be addressed as part of a preparatory process for a possible FTAAP including, inter alia, possible pathways to an FTAAP; and expansion of the study on identifying convergences and divergences in APEC's regional and bilateral trade agreements to cover additional agreements

and chapters.

At the APEC meetings held in November 2009, the APEC Business Advisory Council (ABAC) urged APEC leaders and ministers to finalize a viable timeframe and modalities for initiating an FTAAP. However, they did not set a timetable and merely pledged in their announcements that they would continue to explore building blocks towards an FTAAP in the future.

### **3.3.2 Potentiality of an FTAAP**

A number of bilateral FTAs involving the APEC member economies have been concluded and some are being negotiated or studied: The coexistence of many bilateral FTAs in this region is sometimes called the 'spaghetti bowl' or 'noodle bowl' syndrome. Without doubt, the potential risks of rising transaction costs have increased due to the coexistence of tangled and often conflicting trade rules and standards among different FTAs. With one set of preferences replacing many multi-layered sets of preferences, an FTAAP would reduce this noodle effect in the Asia-Pacific region.

An FTAAP could potentially create the largest trade liberalization agreement in history and would result in very extensive trade creation and further economic benefits. An APEC study (2009a) released during the APEC leaders' week in November 2009 estimates that a comprehensive FTAAP would increase welfare and real GDP of APEC members by 2.71 percent and 1.14 percent, respectively.

The initiation of discussion on the FTAAP could revive the Doha Round negotiations as the EU, Brazil, India and others would be worried that the US would turn to APEC as an alternative option in the event of failure of the Doha Round. In fact, this is what happened when the first APEC summit, held in November 1993, revived the Uruguay Round.

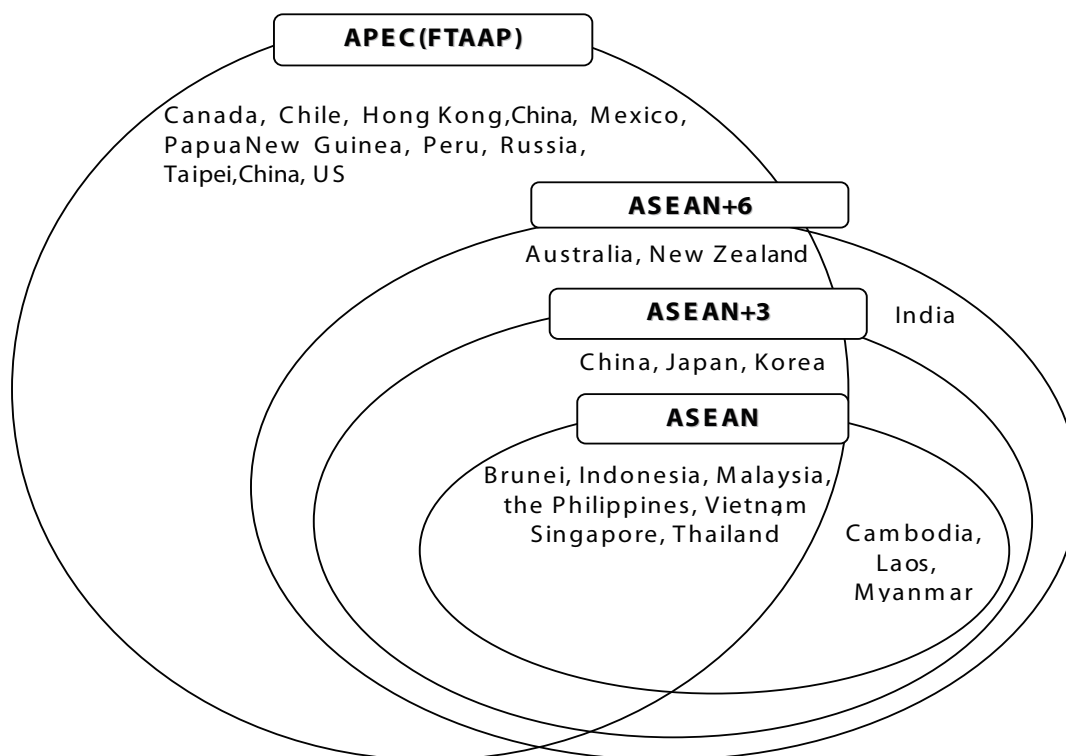
### **3.3.3 Prospects for an FTAAP**

Despite the potential benefits arising from an FTAAP, huge obstacles need to be overcome before it can become a reality. For example, it has to win over other competing initiatives aiming at Asia-Pacific regionalism, such as ASEAN Plus Three (APT), the East Asian Summit (EAS), and Australian Prime Minister Kevin Rudd's recent proposal to build an Asia-Pacific Community (APC). (See Figure 3.2)

It is fair to say that the success of an FTAAP would be largely dependent on the preferences and role of China and the US. The US does not want a line to be drawn down the middle of the Pacific with the US on one side and the Asian countries

on the other. There is no doubt that the US was the strongest proponent of the FTAAP in Hanoi in 2006. It seems that the US proposed the initiation of studies on the FTAAP as its counter strategy against regionalism in East Asia. However, the US appears to have become less enthusiastic about the

proposal, following its signing of bilateral FTAs with major Asian economies, including that with Korea. Furthermore, it would not be easy for the Obama Administration to win support for any new trade deal in Congress. On the other hand, China seems presently lukewarm to an FTAAP.



**Figure 3.2 Overlapping Groupings of Different Initiatives**

Another important challenge is that the APEC member economies are quite diverse and heterogeneous in their economic systems and stages of economic development as well as their cultural background and political systems. Diversity and heterogeneity imply that different countries have different policy objectives; hence it would be difficult for the diverse membership of APEC to agree to begin negotiations on an FTAAP. Even if they were all to agree to begin negotiations, it would be very hard to imagine all APEC members reaching agreement on the requisite elements of a high-quality FTA.

Indeed, the road to an FTAAP will be rocky, and hence within APEC the FTAAP has been perceived as neither a short-term agenda nor a long-term goal, but only as “a long-term prospect”. Therefore, it is hard to imagine the FTAAP being accomplished as a “Big-Bang” negotiated result.

Rather, an incremental approach is likely to be more politically feasible.

In this regard, the Trans-Pacific Partnership (TPP) trade agreement could become a useful building block towards an FTAAP, as noted in APEC (2009b). The TPP would be a preferential trading arrangement to be built on the Trans-Pacific Strategic Economic Partnership Agreement (P4) between Brunei, Chile, New Zealand, and Singapore, which was signed at the 2005 APEC Trade Ministers Meeting and entered into force in 2006. During the APEC meeting in November 2009, US Trade Representative Ron Kirk announced that the Obama Administration would participate in negotiations to establish a new TPP trade agreement. This announcement means that the TPP negotiations will soon commence and will involve Australia, Brunei, Chile, New Zealand, Peru, Singapore, the US, and Vietnam. Other APEC members (e.g., Canada

and possibly Mexico) may perhaps soon follow.

The TPP trade agreement can become a useful vehicle for an FTAAP, because it will be open for accession by other countries and is intended to serve as a building block towards APEC's longer-term goal of an FTAAP. Thus, a fully-fledged FTAAP will not be possible in the foreseeable future but an APEC-minus FTA may be.

## 3.4 Regional Economic Cooperation

### 3.4.1 Economic Cooperation in East Asia

Despite their trade and investment interdependence, the three major countries in East Asia, China, Japan, and Korea, had not initiated any formal negotiations about regional cooperation until the end of the 1990s. While many other countries in Asia were busy in bilateral trade negotiations, these three countries were busy with other issues. For a long time, this part of Asia, which makes up one fifth of the world economy, has not formed any region-wide economic cooperation, although these three countries were involved in looser forms of economic cooperation with other economies through APEC, ASEM, and ASEAN+3. As a result, East Asia remained the only major region in the world without any formal RTAs.

At the turn of a new century, the attitude of East Asian countries changed, and they showed more enthusiasm and interest toward regional economic cooperation. Their major motivations are to stimulate domestic economic reform and keep the momentum of trade liberalization in line with worldwide regionalism. In a trilateral summit meeting in Brunei in November 2001, they decided to take a number of steps in the near future toward stronger economic cooperation, including finance ministerial meetings, business forum, exchanges in the fields of culture, human resources, information technology, etc. Since the global financial crisis, Japan has become more active in regional integration. On many occasions, its leaders have called for the establishment of "East Asia Community".

One year later, in a summit meeting in Phnom Penh, November 2002, the Chinese Premier Zhu Rongji proposed the study of the possibility of a Northeast Asian Free Trade Agreement consisting of China, Japan, and Korea (NEAFTA). The trilateral joint research project was initiated and since then

undertaken by the Development Research Center (DRC) of the China State Council, the Japan National Institute for Research Advancement (NIRA), and the Korea Institute for International Economic Policy (KIEP). This research has been carried out on a step-by-step basis, examining first the macroeconomic effects of a possible free trade agreement among China, Japan, and Korea and then sectoral impacts and policy of an NEAFTA.

Specifically, research on its industrial effects was conducted for the agriculture, automobile, and electronics industries in 2004 and for the fishery, textile, and steel industries in 2005. In addition, basic research on the effects on the service sectors was conducted in 2005 as well. The relevant governments have not officially taken part in research, while the three research institutions report the outcomes of their joint research to the trilateral summit every year until 2009. In October 2007, the three countries finally agreed to conduct industry-government-academics joint research on the NEAFTA.

Despite the expected benefits brought by an FTA between any two of the three countries, official negotiations were carried out in a cautious manner. It is of course due to the existence of some obstacles for the countries. For example, agriculture is vulnerable in both Korea and Japan, and small and medium enterprises are less competitive than conglomerates in all three nations. Also, the recent emergence of conflicts in the Korea-Japan relations and growing discord between China and Japan all make it hard for bilateral FTAs or a trilateral FTA to come into existence.

Korea and Japan agreed to launch an official negotiation for a bilateral FTA in October 2003. Although they spent five years on joint studies discussing a possible FTA, major lingering issues such as agricultural liberalization and non-tariff barriers continued to remain as obstacles in the formal negotiation. As a result, the negotiation stopped after the 6th meeting in November 2004. The two countries could not resume the formal negotiation until the end of 2009, at a time when they have already competed bilateral FTAs with other partners.

Korea and China are now in the process of pursuing a bilateral FTA. The Korea Institute for International Economic Policy (KIEP) and China's Development Research Center of the State Council (DRC) have been conducting non-governmental



research to analyze the overall effects of a Korea-China FTA from March 2005 to November 2006. And the two countries have been engaged in industry-government-academics joint research since March 2007. According to the joint study, a Korea-China FTA would improve both countries' trading activities quantitatively and qualitatively. The effects will not simply be reduction of tariffs but also the acceleration of Northeast Asia's economic integration. Evidently, negative effects created by an FTA are still major hurdles to a China-Korea FTA. Especially for Korea, small to medium sized manufacturing firms, as well as agriculture and marine products industries, would need to be restructured. However, a China-Korea FTA would serve as a key leverage point from which regional economic cooperation and integration in East Asia could move forward.

East Asian countries also paid much attention to Asian monetary and financial cooperation after the financial crisis of 1997. They realized that the weakness of the financial sector had instigated the crisis; so they needed to establish a regional monetary and financial cooperation system to prevent a recurrence of the crisis. Together with ASEAN, they also introduced the Chiang Mai Initiative as a currency swap arrangement mechanism. In addition, these countries undertook the Asian Bond Market Initiative to avoid heavy dependence on the external financial markets and to use regional resources more efficiently.

Since the outbreak of the global financial crisis, in recognition of the ever-increasing economic and financial linkages and interdependency, major countries in East Asia have considered introducing macroeconomic coordination mechanisms and a surveillance system. In order to confront rapidly increasing short-term capital flows in this region, they also have made considerable efforts to maintain exchange rate stability and to achieve exchange rate coordination. Recently, the ADB took the initiative to introduce and utilize a Regional Currency Union (RCU), and the finance ministers of China, Japan, and Korea agreed to engage in joint research on Asian monetary integration.

### **3.4.2 Economic Cooperation in Cambodia, Laos, and Vietnam**

Cooperation between Cambodia, Laos, and Vietnam existed as a distinctive pattern of economic integration in Asia. Over the past decade, the countries in this region experienced relatively high

economic growth via pursuing policy reforms and facilitation initiatives to promote free trade and investment in the region. The most remarkable event in regional integration was the successive accession of Vietnam, Laos and Cambodia into the ASEAN in the second half of the 1990s. Regional and cross-border institutions have been established to enhance economic cooperation within the ASEAN framework as well as within the region of Cambodia, Laos, and Vietnam. This comprehensive cooperation has mobilized resources and improved efficiency among these economies, helping them join the ASEAN Economic Community (AEC) by 2015.

One of the most important cooperative activities among Cambodia, Laos, and Vietnam is the Greater Mekong Subregion (GMS) cooperation program. Established in 1992 under the initiative of Asia Development Bank (ADB), GMS involves Cambodia, China, Laos, Myanmar, Thailand, and Vietnam to boost economic relations among the countries. This has led to the international recognition of the subregion as a growth area. The GMS Program develops priority infrastructure linking the regional economies. Economic corridor projects are important ones in the GMS Program. The East-West Economic Corridor (EWEC) connecting Myanmar, Thailand, Laos, and Vietnam was launched in 1998 and became operational in 2006. Afterward, the Cambodia-Laos-Vietnam Development Triangle and the Cambodia, Laos, Myanmar and Vietnam subregion were successively established in 2004 and in 2007, respectively, to work towards the realization of the EWEC for the development of the countries and the international issues of common interest. The implementation of the Development Triangle program was supported by the Vietnam-Laos-Cambodia tri-junction point agreement signed in 2008. The GMS Program has significantly contributed to the regional integration in Cambodia, Laos, and Vietnam. The improvement of physical infrastructure and regional connectivity has facilitated cross-border trade and investment, the economies of agglomeration, and enhanced the region's competitiveness. Since its inception, GMS has become one of the fastest growing regions in the world. Exports from GMS countries increased rapidly from US\$37 billion in 1992 to US\$211 billion in 2007 and annual tourist arrivals more than double from 10 million in 1995 to about 26 million in 2008. Foreign direct investment (FDI) into GMS countries also rose remarkably, from about US\$3 billion in

1992 to over US\$20 billion in 2008 (ADB, 2009a).

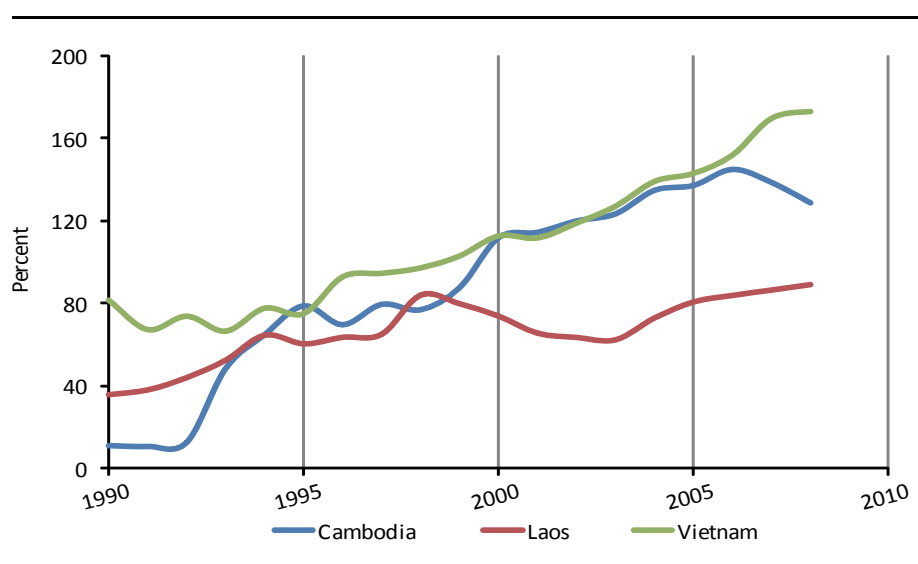
Geographical and historical factors are also the impetus for the regional cooperation. Many bilateral and multilateral agreements and treaties have been made to diverse regional cooperation. The Mekong River Commission (MRC) was formed in 1995 by Cambodia, Laos, Thailand and Vietnam. The countries signed the Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin to coordinate in management of water resources and development of the economic potential of the river. In addition, the Ayeyawady-Chao Phraya-Mekong Economic Cooperation Strategy (ACMECS) was initially incorporated by Cambodia, Laos, Myanmar, and Thailand in 2003 and then added Vietnam in 2004. The ACMECS aimed for strengthening trade-investment and tourism cooperation among the countries. The countries, through the economic cooperation framework, collaborated in five priority areas of cooperation and endorsed the Economic Cooperation Strategy Plan of Action, under which 46 common projects and 224 bilateral projects are being implemented over ten years. Most recently, the ACMECS Senior Officials' Meeting in Bangkok emphasized the need to strengthen investment in industrial infrastructure, particularly supporting and logistics industries as well as Special Border Economic Zones, Industrial Estates and joint-ventures along the East West Economic Corridor, the Southern Economic Corridor (ACMECS, 2009). Many multilateral and bilateral projects and programs have been conducted such as the trade mission arrangement, establishment of ACMECS Business Council, establishment of one stop service trade and tourism in ACMECS countries at the border areas, setting up single stop inspection at major border areas, arrangement for public-private sector meeting, encouragement of increased use of local currencies for border trade transactions, implementation of Account Trade System, establishment of contact points to facilitate exchange of trade information, and formation of harmonized mechanism of border trade among ACMECS members (ACMECS, 2009). The movements have put into practice the area of trade and investment facilitation and

paved the way for the ACMECS countries to work towards realizing the "Five Countries, One Destination" idea.

Bilateral economic cooperation has had significant changes that facilitate trade and investment between the countries in recent years. The development of international border gates, border economic zones, and cross border markets has driven up trade and investment activities among regional countries. The two-way trade turnover between Vietnam and Laos steadily increased from approximately US\$200 million in 2000 to more than US\$400 million in 2008, and is projected to reach US\$1 billion by 2010 (ASEAN, 2009a), while the two-way trade turnover between Vietnam and Cambodia grew from US\$950 million in 2006 to US\$1.7 billion in 2008, and is expected to reach US\$2 billion by 2010 (ASEAN, 2009b). The main items of Vietnam's exports to Laos and Cambodia are fuel, steel, iron, machinery and textiles and garments while those of Laos and Cambodia to Vietnam are mainly tobacco materials, rubber, and wood products. In addition, Laos and Cambodia have become attractive markets for Vietnam's foreign investment. Vietnam's direct investment in Laos reached US\$2 billion in 2009 (ASEAN, 2009a), the third largest investor among 30 countries and territories investing in Laos, after China and Thailand. Vietnam's projects focus on hydro-electricity, mining, transportation, and industrial crops. Vietnam has 63 investment projects in Cambodia with over US\$863 million in 2009; these projects are mainly in the areas of agro-forestry, mineral, telecommunications, banking, and insurance (MPI, 2009).

Regional cooperation and economic integration have brought substantial benefits and opportunities to Cambodia, Laos, and Vietnam. Rapid increase in the values of trade and investment is an important indicator of how effectively these economies have done. The degrees of openness in terms of the trade/GDP ratios have gradually increased over the last decade for all economies; for instance, the Vietnam's trade/GDP ratio tends to move up from 80 percent in 1990 to around 170 percent in 2008. (See Figure 3.3)





**Figure 3.3 Trade/GDP Ratio of Cambodia, Laos, and Vietnam, 1990-2008**

Source: UNCTAD 2008

Moreover, FDI plays an important role in the economic growth of the region. A total FDI inflow in terms of stock was approximately US\$2 billion in 1990 and reached US\$55 billion in 2008, becoming a key factor in the rapid economic growth and structural transformation of Cambodia, Laos, and Vietnam. In particular, FDI inflows to Cambodia as a percentage of gross fixed capital formation grew from 22 percent in 2000 to roughly 50 percent in 2008. (See Figure 3.4)

Although the global recession has diminished capital inflows and reduced demand for exports and tourism in Cambodia, Laos, and Vietnam, the performance of economic growth is relatively higher than elsewhere partly due to their economic cooperation. Moreover, obstacles and challenges should be continuously taken into consideration in developing the strategic framework for economic cooperation to further promote the transnational development in Cambodia, Laos, and Vietnam.

### 3.4.3 Economic Cooperation in Southeast Asia

Facing the dynamic global economic environment and the increasing competition from China and India, Southeast Asian countries, mainly the ten ASEAN countries, have accelerated their progress toward regional economic integration. A recent milestone in facilitating economic cooperation among the ASEAN members is the agreement of establishing an ASEAN Economic Community (AEC), emanated by ASEAN Leaders' vision in the 2007 summit in

Singapore. AEC targets to transform ASEAN into a single market and production base that would be highly competitive and fully integrated into the global economy by 2015. The economic integration goals of AEC include the elimination of tariffs, free movement of professionals, freer movement of capital, and a streamlined customs clearance procedure.

Some important measures on economic cooperation and integration among ASEAN countries have in fact started as far back as in 1993 when the ASEAN Free Trade Area (AFTA) was initiated. The purpose was to integrate the region into a market economy comprising of 500 million people in Southeast Asia. On this free trade platform, intra-ASEAN industrial linkages can be forged with the ultimate aim of developing the ASEAN region as a viable international production center. Apart from the AFTA, ASEAN countries extended their regional cooperation into investment and other areas. These include the ASEAN Framework Agreement on Services (AFAS) in 1995, the ASEAN Industrial Cooperation (AICO) scheme in 1996, and the ASEAN Investment Area (AIA) in 1998. The ASEAN Comprehensive Investment Agreement (ACIA), recently signed on February 26, 2009, improved the previous provisions of ASEAN Agreement for the Promotion and Production of Investments (1987) and AIA and will enhance protection of investment to improve investors' confidence. Some other

cooperation agreements cover financial service, intellectual property rights protection, and security of food and pharmaceutical products. Agreements were also made on facilitating the implementation of all the above agreements, such as the ASEAN Single Window (2005), which aims to speed up the clearance of shipments and the release of goods by customs within 30 minutes by 2012 rather than the current clearance of up to five days.

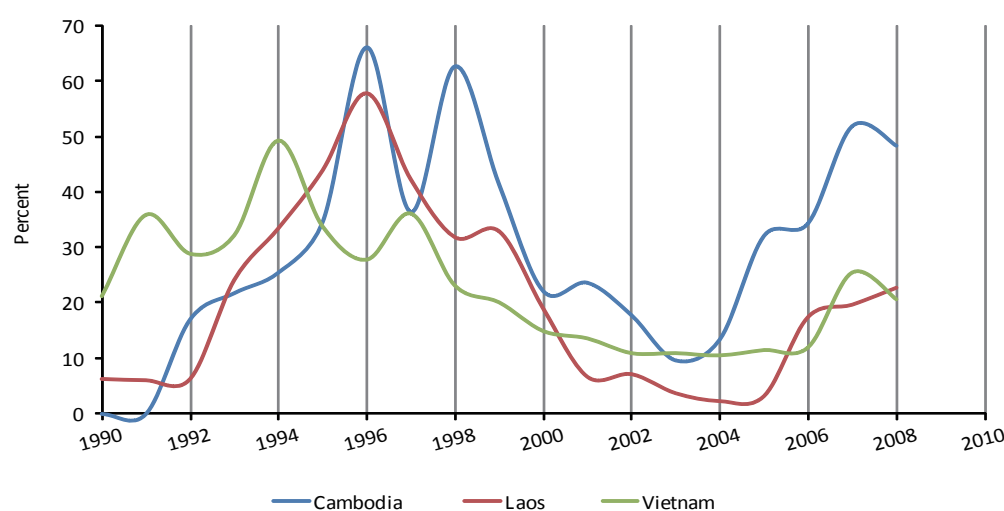
The AEC scheme set up in 2007 integrated almost all the previously signed agreements into one total document. The provisions of AEC covers not only the free flow of goods and services, free flow of professionals and skilled labor, freer flow of capital and investment, but also the competition policy, taxation, and the implementation schedule.

The overall goal of AEC is “to achieve higher levels of economic dynamism, sustained prosperity, inclusive growth and integrated development of ASEAN”.<sup>1</sup>

In order to effectively realize the blueprint of AEC, detailed plan of projects and time schedule were spelled out. An AEC Scorecard mechanism is used to monitor the progress of implementation of the blueprint. As of September 2009, 76 action plans have been implemented among the 103 actions of the plan in AEC blueprint.<sup>2</sup>

1 ASEAN Economic Community Blueprint, ASEAN Secretariat, January 2008

2 Press Release for the 2nd ASEAN Economic Community Council Meeting October 22, 2009.



**Figure 3.4 FDI Inflows to Cambodia, Laos, and Vietnam, 1990-2008**  
(% of Gross Fixed Capital Formation)

Source: UNCTAD 2008

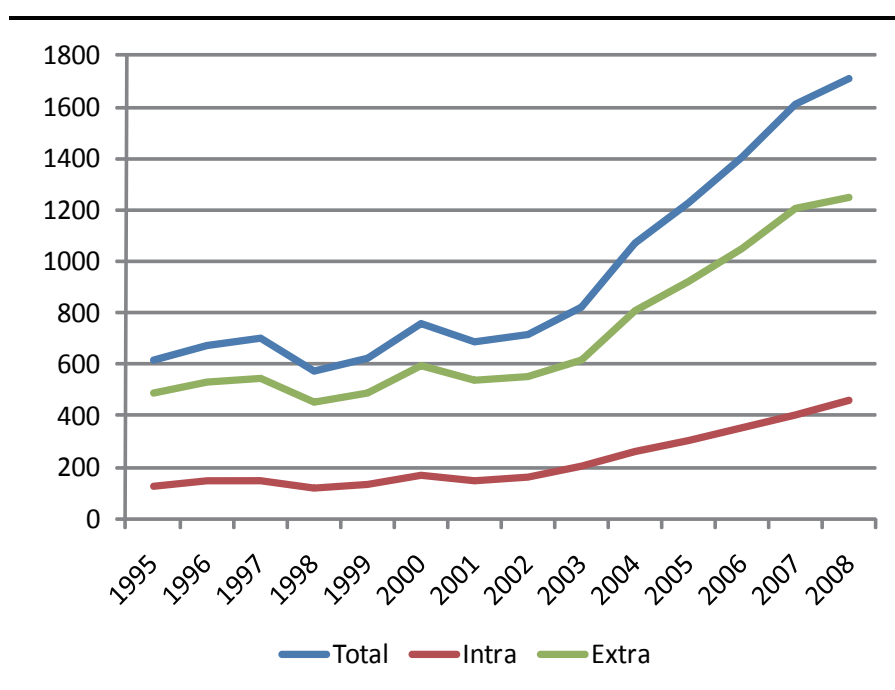
Although the effects of the economic cooperation on the competitiveness and economic performance of the region cannot be seen directly and immediately, the progress of economic cooperation and integration of ASEAN countries can also be observed by a few common indicators, such as trade flow, investment flow, and economic performance.

In 2009, the average tariff rate of ASEAN members has declined to 1.65%.<sup>3</sup> According

to the press release of ASEAN Secretariat on 31 December 2009, starting the first day of 2010, the ASEAN-6 (Brunei Darussalam, Indonesia, Malaysia, Philippines, Singapore and Thailand) will remove the tariff to zero for total 54,457 tariff line under the Common Effective Preferential Tariffs for ASEAN Free Trade Area (CEPT-AFTA). The average tariff rate for ASEAN-6 is expected to further decrease from 0.79% in 2009 to just 0.05% in 2010.<sup>4</sup> Intra-ASEAN

3 ASEAN Economic Community, Chartbook, 2009, page 15.

4 ASEAN Secretariat, <http://www.aseansec.org/24146.htm>.



**Figure 3.5 Trend of ASEAN Trade (US Billion Dollars)**

Source: ASEAN Statistical Yearbook 2008, <http://www.aseansec.org/20440.htm>.

trade has maintained a steady expansion for the past few years, though extra-ASEAN trade increased, too (See Figure 3.5). Intra-ASEAN foreign direct investment has maintained a rising trend, increased by 25.5 percent in 2007, and 13.4 percent in 2008, respectively, while the net extra-ASEAN investment inflow in 2008 was –20.6 percent.<sup>1</sup>

### 3.4.4 Economic Cooperation in South Asia

On December 8, 1985, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka established the South Asian Association for Regional Cooperation (SAARC) to enhance regional linkage. In April 2007, Afghanistan became its eighth member. The SARRC charter talks of socio-economic-cultural development and growth of member nations in a manner that is conducive to improving the quality of life of individuals so that they can live their lives with dignity.

The institutional set up of SAARC consists of deliberation meetings of the Head of States, Foreign Ministers, and Foreign Secretaries on a wide range of issues at regular intervals. The issues discussed in the SAARC charter relate to economic

and social agenda, poverty alleviation, cooperation in environment and legal issues, utilization of SARRC development funds, promotion of human development, communication, information and media, cooperation with international organizations, people to people contact and promotion, and development of SARRC centers. The SAARC cooperation measures are put to work through the involvement of the technical committees and the Working Groups.

The SAARC today is also working on new areas. These relate to cooperation in energy and security issues, water scarcity in the South Asia, infrastructure development including IT & telecommunication, and advent of some new and old sea, land and rail routes in the Asian region, forging for services and investment liberalization measures, promoting tourism and health care, harmonizing regulatory standards related to customs, accounting, education, services including professional activities, among others, taking measures to tackle climate change, disaster management, and forming the South Asian University, South Asian food bank, and revitalizing South Asian Development fund and making it broad based to cater to the social agenda of the SAARC including poverty alleviation programs, gender

<sup>1</sup> ASEAN: Foreign Direct Investment Statistics, Table 25, <http://www.aseansec.org/18144.htm>.

empowerment, child welfare, among others. Also, recently the SAARC secretariat gave statements to deal with the financial crisis affecting almost all the countries of the World, including the South Asian countries. As a mark of commitment to regional integration, regional projects in telemedicine, tele-education, solar rural electrification, seed testing laboratories, and rainwater harvesting have been initiated. The Heads of States are scheduled to meet in Bhutan in April 2010 under the aegis of the sixteenth SAARC summit meeting.

Despite such comprehensive institutional set up and extensive programs for economic and social progress, the SAARC members have total intra-regional formal trade to be around US\$19 billion only, which is just over 5 percent of their total world trade of US\$420 billion in 2010. This is meager percentage compared to the intra-regional trade of EU 27 of approximately 66 percent, NAFTA with 55-percent intra-regional share, and ASEAN with corresponding figure of 21 percent. The low intra-regional trade among SAARC countries however points to the fact that there is a lot of potential to increase trade. One can surely conjecture by the fact that many countries/regions have shown active interest in getting observer status to the SAARC meetings. These are the EU, NAFTA, China, Japan, Korea, Myanmar and Iran. These countries may have their own reasons to join the SAARC but they all see the importance of large untapped markets in the South Asian region pertaining to merchandise trade, services, and investments. The population of the eight member nations is 1.4 billion and SAARC as a group is expected to grow at more than 5 percent on an average in the coming years. The total world trade of the SAARC countries may touch US\$1,000 billion by 2015. It is projected that if the South Asian economies can increase growth rates to 8-9 percent, attain the Millennium Development Goals and increase capacities in infrastructure, the region can meet the challenges of poverty, illiteracy, inequality and other inadequacies in the system. Maldives and Bhutan are the fastest growing countries in the region: They grew at the rates of more than 15 percent in 2006. Maldives is the richest in terms of per capita income level, followed by Sri Lanka, Bhutan, and then India in the SAARC.

The SAARC has made a number of efforts to promote economic integration and cooperation in the South Asia region. In December 1991, SAARC approved to formulate an agreement to establish

a Preferential Arrangement. The Agreement on South Asian Association for Regional Cooperation (SAPTA), which was signed on April 11, 1993 and entered into force on December 7, 1995, reflected the desire of the Member States to promote and sustain mutual trade and economic cooperation within the SAARC region through the exchange of concessions. The implementation of the agreement was characterized by sequential rounds of negotiations in which trade preferences were granted on a product-by-product basis. Around 5000 tariff lines were given concessions under the SAPTA process. Only least developed countries (LDCs) obtained significant trade preferences while most of the trade among the largest countries was still subject to considerable trade barriers (Baysan, et al., 2006; SAARC Secretariat, 2006). The SAPTA agreement has given way to the 25-article South Asian Free Trade Area (SAFTA) agreement, which came into force in 2006. The countries have plans to form a customs union at a future date and possibly form an economic union among the South Asian countries modeling the European countries. In the first two years (three years for Sri Lanka) since 2006 the three non-LDC member states (India, Pakistan, and Sri Lanka) were asked to reduce tariff rates to 20 percent and then by 2012 to 0-5 percent. LDCs in the union have to reduce tariff rates to 30 percent by 2009 and then by 2016 to reduce rates between 0-5 percent.

Some of the flawed concerns (flawed economic logic) raised on the South Asian regional integration process by some professionals, politicians, amateurs and economists alike are: (a) Low intra-regional trade among SAARC countries portends a bleak future for the regional integration process; (b) Substantial trade diversion in the South Asian region is taking place because trade is diverted from low cost non-member suppliers to high cost member nations and resulting trade is welfare reducing; (c) There are no benefits of participation for relatively large and big size countries like India and Pakistan; (d) Similarity in production structures leads to low intra-regional trade; (e) Low supply capacities and investible resources limit any possibility of investment cooperation; (f) Regional and multilateral liberalization will lead to take over of the small size markets by big size countries.

The core question in context of the SAARC is its low intra member trade and low share in world GDP (2.8 percent). The intra-regional trade is

just little more than 5 percent of its (SAARC) trade with the rest of the world. Will SAFTA improve intra regional trade? Rodriguez (2007) evaluates the South Asia Free Trade Agreement (SAFTA) within the global structure of overlapping regional trade agreements (RTAs) using a modified gravity equation. It concludes that SAFTA would have a minor effect on regional trade flows and the impact on custom duties would be a manageable fiscal shock for most members. Second, the study ranks the trade effects of other potential RTAs for individual South Asian countries and SAFTA: RTAs with North American Free Trade Agreement (NAFTA) and the European Union (EU) dominate one with the Association of South East Asian Nations (ASEAN). Baysan, et al. (2006) argue that it is unlikely that the most efficient suppliers of the member countries are within the region. Based on that and on the restrictiveness of SAFTA's sensitive lists and rules of origin, it concludes the economic merits of SAFTA are "quite weak." Bandara and Yu (2003) find that the full elimination of trade barriers between South Asian countries would increase the welfare level of India (by 0.2 percent) and Sri Lanka (by 0.03 percent), but decrease the welfare level of Bangladesh (by 0.1 percent). Extending the agreement to ASEAN would decrease welfare of all South Asian countries, but would increase it for an extension to NAFTA or EU (except for the rest of South Asia, which loses if it is extended toward EU). Srinivasan (1994) also forecasts the effects of SAFTA. It uses total (exports plus imports) bilateral trade flows as the dependent variable. Given data restrictions, the analysis is limited to Bangladesh, India, Nepal, Pakistan, and Sri Lanka. It concludes that Bangladesh and Nepal would gain the most from the full elimination of tariffs among South Asian members. India, Pakistan, and Sri Lanka would have only marginal benefits but would enjoy larger gains if there were a liberalization agreement with the European Economic Community.

The above studies show that SAFTA can be beneficial to member nations if it aligns itself with the EU and NAFTA countries. However, the analysis confines itself to trade in merchandise and is based on assumptions of full employment and perfect competition. Also, there is lot of potential in increasing trade in chemicals, clothing, paper, leather products, pharmaceuticals, electronics, and ceramics in the South Asian region. The future lies in trade in services and manufactures as these have

become an important component of trade among South Asian countries. The service trade pertains to transport, travel, construction, communications, computer and information services, and financial and insurance services, energy, education, audio visual service, sports, and environmental services. Also, regional investments within SAARC have not only the potential to stimulate trade but also raise efficiency and competitiveness of member states. This is because FDI is likely to be driven by production processes which are vertically integrated rather than horizontally diversified. FDI in South Asia locates segments of the production process in the lowest cost site and has potential to flow into IT, IT enabled services & telecommunication, and export sectors. Efficiency seeking investments in such sectors will promote trade in services in the South Asian region. Also, there is a lot of scope for promoting trade from and among the LDCs. The question is to increase their capacities and for that capacity building, connectivity and infrastructure development are key to success of the South Asian integration process. The second is the balancing of safeguard actions with liberalization commitments made by member nations especially those of LDCs in the SAARC Countries (Bhutan, Maldives, Bangladesh, Nepal, and Afghanistan).

Jagdish Bhagwati of Columbia University has written extensively on the trade diversion process in South Asia because of the high tariff rates which prevailed in these countries since the beginning of the 1980s. Over the years the tariff duties have come down and so is the possibility of lower estimates of trade diversion. However, with trade diversion there is trade creation in South Asia for manufacturing sector (Das, 2009) and so regional integration process in South Asia may not be necessarily welfare reducing. It is said that in the context of South Asian products which could be imported at lower cost are not imported because of lack of cooperation. There is cost of non-cooperation.

### 3.5 The Degree of Correlation among the Asian Economies

The Asian financial crisis in 1997 and the global financial crisis in 2008 showed that the Asian economies are integrated not just through trade and investment, but also financially. A financial problem in one of the Asian economies can easily spread to other economies within a short period of

time. Such interdependence among the financial sectors of these economies led many people to wonder to what extent macroeconomic and monetary integration has progressed in the Asian region and whether it is feasible for Asian countries to form a monetary union like the Euro area?

To explore the viability of regional economic and monetary integration, the literature typically relies on the theory of optimum currency area (OCA). Specifically, the OCA theory proposes the following major preconditions for establishing a currency area: (i) openness and goods market integration; (ii) labor mobility as a representative of factor market integration; (iii) symmetry in real shocks and business cycle synchronization; (iv) financial market integration; and (v) policy coordination.<sup>1</sup> The previous studies tends to analyze the degree of integration based on the preconditions (i), (iii) and (iv), while there have so far been few studies focusing on the condition (ii).

This section analyzes the macroeconomic aspects of integration with a particular focus on the OCA preconditions (i), (iii) and (iv). The previous studies generally investigate the cross-country correlation of macroeconomic variables in the region. In the context of Asian region, however, the influence of external economies such as the United States must be taken into consideration

to assess the degree of macroeconomic and monetary integration. The aim of this section is to reveal whether recent regional integration in Asia has been driven by autonomous development or by the influence of the US and/or other external economies.

### 3.5.1 Real Output and Price Correlation

Correlation of real output growth or business cycle synchronization is most often analyzed in the literature on economic and monetary integration. If forming a monetary union, for instance, the member countries need to relinquish their own monetary policy autonomy. To the extent that business cycles are synchronized between countries, it will be less costly for them to establish a monetary union.

A straightforward approach to assess the degree of business cycle synchronization is to observe the cross-country correlation of real GDP growth rates that is presented in the lower panels of Table 3.4 for both the pre-crisis (Q1 of 1985 – Q4 of 1996) and the post-crisis (Q1 of 1999 – Q4 of 2007) period. The data from 1997 to 1998 is excluded from the sample period, since the Asian currency crisis severely affects the real output fluctuations and, hence, increases the correlation of real GDP growth rates to a greater extent. The period of the recent global financial crisis in 2008 and 2009 is also excluded from the latter sub-sample due to the same reason.

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<sup>1</sup> See Kawai (1987), Tavlas (1993) and De Grauwe (2005).

**Table 3.4 Correlation Matrix of Real GDP Growth (Lower Panel) and CPI Inflation (Upper Panel)**

Q1/1985-Q4/96	US	JP	CH	KR	HK	TW	SG	MY	IDN	TH	PH	VN	AU	IND	RU
United States	-	<b>0.66</b>	-0.24	<b>0.58</b>	<b>0.49</b>	0.22	<b>0.55</b>	0.02	0.02	<b>0.34</b>	<b>0.38</b>	n.a.	<b>0.26</b>	0.00	n.a.
Japan	0.11	-	-0.39	<b>0.56</b>	<b>0.45</b>	0.24	<b>0.54</b>	0.17	-0.16	0.23	<b>0.54</b>	n.a.	-0.01	0.11	n.a.
China, People's Republic of	<b>0.30</b>	-0.29	-	-0.24	-0.01	0.05	-0.09	0.06	-0.06	-0.14	-0.38	n.a.	-0.04	-0.25	n.a.
Korea, Republic of	-0.16	<b>0.24</b>	-0.20	-	<b>0.79</b>	<b>0.58</b>	<b>0.78</b>	<b>0.54</b>	<b>0.33</b>	<b>0.64</b>	0.20	n.a.	-0.30	<b>0.59</b>	n.a.
Hong Kong, China	0.00	-0.12	0.10	<b>0.54</b>	-	<b>0.80</b>	<b>0.87</b>	<b>0.75</b>	<b>0.47</b>	<b>0.69</b>	0.11	n.a.	-0.42	<b>0.45</b>	n.a.
Taipei, China	-0.14	-0.15	-0.39	<b>0.38</b>	<b>0.55</b>	-	<b>0.68</b>	<b>0.73</b>	<b>0.34</b>	<b>0.62</b>	0.02	n.a.	-0.53	<b>0.38</b>	n.a.
Singapore	-0.06	-0.22	-0.19	-0.01	<b>0.26</b>	0.10	-	<b>0.68</b>	<b>0.38</b>	<b>0.70</b>	<b>0.29</b>	n.a.	-0.49	<b>0.31</b>	n.a.
Malaysia	-0.21	-0.25	-0.29	-0.21	-0.04	-0.04	<b>0.74</b>	-	<b>0.40</b>	<b>0.62</b>	-0.04	n.a.	-0.75	<b>0.51</b>	n.a.
Indonesia	-0.11	-0.18	-0.40	-0.05	-0.07	0.10	<b>0.37</b>	<b>0.46</b>	-	<b>0.31</b>	-0.20	n.a.	-0.31	<b>0.49</b>	n.a.
Thailand	-0.09	<b>0.24</b>	-0.35	0.11	0.15	0.12	<b>0.65</b>	<b>0.50</b>	<b>0.25</b>	-	0.14	n.a.	-0.30	<b>0.37</b>	n.a.
Philippines	0.12	-0.07	-0.46	<b>0.33</b>	<b>0.30</b>	<b>0.36</b>	<b>0.58</b>	<b>0.48</b>	<b>0.49</b>	<b>0.39</b>	-	n.a.	-0.15	-0.06	n.a.
Vietnam	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	n.a.	n.a.	n.a.
Australia	<b>0.77</b>	0.13	<b>0.31</b>	-0.19	-0.24	-0.24	0.05	-0.18	-0.12	-0.06	0.08	n.a.	-	-0.33	n.a.
India	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	n.a.
Russia	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-
Q1/1999-Q4/07	US	JP	CH	KR	HK	TW	SG	MY	IDN	TH	PH	VN	AU	IND	RU
United States	-	<b>0.28</b>	<b>0.31</b>	0.13	<b>0.42</b>	<b>0.64</b>	<b>0.64</b>	<b>0.33</b>	-0.21	<b>0.63</b>	0.11	0.09	<b>0.46</b>	-0.16	-0.25
Japan	0.25	-	<b>0.52</b>	-0.05	<b>0.60</b>	<b>0.33</b>	<b>0.35</b>	<b>0.43</b>	0.03	<b>0.41</b>	<b>0.32</b>	<b>0.68</b>	-0.23	<b>0.38</b>	-0.03
China, People's Republic of	-0.15	<b>0.48</b>	-	<b>0.40</b>	<b>0.70</b>	<b>0.59</b>	<b>0.73</b>	-0.10	-0.37	<b>0.40</b>	0.01	<b>0.56</b>	-0.10	0.11	-0.54
Korea, Republic of	<b>0.57</b>	-0.08	-0.38	-	0.23	0.03	<b>0.32</b>	-0.49	-0.34	0.17	0.11	-0.06	<b>0.45</b>	-0.35	-0.62
Hong Kong, China	<b>0.42</b>	<b>0.73</b>	<b>0.42</b>	0.17	-	<b>0.54</b>	<b>0.44</b>	<b>0.49</b>	0.04	<b>0.76</b>	<b>0.38</b>	<b>0.74</b>	0.02	<b>0.42</b>	-0.48
Taipei, China	<b>0.58</b>	<b>0.44</b>	<b>0.36</b>	<b>0.42</b>	<b>0.57</b>	-	<b>0.62</b>	<b>0.32</b>	-0.09	<b>0.57</b>	0.15	<b>0.49</b>	0.02	0.07	-0.21
Singapore	<b>0.65</b>	<b>0.68</b>	<b>0.34</b>	<b>0.38</b>	<b>0.81</b>	<b>0.85</b>	-	-0.11	-0.36	<b>0.29</b>	-0.14	0.15	<b>0.30</b>	-0.12	-0.33
Malaysia	<b>0.53</b>	<b>0.50</b>	0.13	<b>0.55</b>	<b>0.73</b>	<b>0.64</b>	<b>0.73</b>	-	<b>0.52</b>	<b>0.59</b>	<b>0.54</b>	<b>0.55</b>	-0.11	<b>0.46</b>	0.23
Indonesia	-0.26	<b>0.42</b>	<b>0.40</b>	-0.24	<b>0.57</b>	0.04	<b>0.29</b>	<b>0.42</b>	-	0.10	<b>0.54</b>	0.27	-0.21	<b>0.59</b>	<b>0.61</b>
Thailand	0.24	0.27	0.20	0.15	<b>0.48</b>	<b>0.41</b>	<b>0.44</b>	<b>0.70</b>	<b>0.45</b>	-	<b>0.41</b>	<b>0.55</b>	0.16	0.20	-0.45
Philippines	0.22	<b>0.63</b>	<b>0.63</b>	0.07	<b>0.73</b>	<b>0.61</b>	<b>0.68</b>	<b>0.68</b>	<b>0.57</b>	<b>0.54</b>	-	<b>0.49</b>	-0.16	0.12	0.26
Vietnam	-0.28	0.22	<b>0.69</b>	-0.62	0.10	0.09	0.10	-0.34	<b>0.42</b>	-0.11	0.18	-	-0.48	<b>0.47</b>	-0.10
Australia	0.25	-0.04	0.20	<b>0.30</b>	-0.10	<b>0.42</b>	0.13	0.14	-0.32	0.12	0.21	0.03	-	-0.30	-0.35
India	0.26	<b>0.29</b>	<b>0.61</b>	-0.06	<b>0.44</b>	<b>0.41</b>	<b>0.41</b>	<b>0.28</b>	0.21	<b>0.31</b>	<b>0.50</b>	<b>0.45</b>	<b>0.38</b>	-	0.19
Russia	0.25	<b>0.42</b>	0.13	<b>0.35</b>	<b>0.67</b>	0.24	<b>0.47</b>	<b>0.80</b>	<b>0.58</b>	<b>0.59</b>	<b>0.59</b>	-0.33	-0.09	0.23	-

**Notes:** The lower panel shows correlations of real GDP growth rates and the upper panel shows those of CPI inflation rates. Both GDP growth rates and CPI inflation rates are calculated using the quarterly series of real GDP and CPI and as the percentage change of the corresponding period of the previous year. Bold and painted figures denote the positive and statistically significant correlations at least at the 10 percent level (one-tailed test). "n.a." represents "not available". Bold and Painted figures denote the significant correlation at the 10 percent level (one-tailed test).

**Sources:** CEIC Asia database and the calculation by Kiyotaka Sato.



First, in the pre-crisis period, positive and statistically significant correlations are observed mainly among ASEAN5 countries and some Asian NIEs. Interestingly, most Asian countries do not exhibit positive and significant correlations with the US, Japan, and China in that period. Second, in the post-crisis period, positive and significant correlations are observed among most Asian countries. Japan and China improve the extent of correlations with most Asian countries, while the US exhibits positive and significant correlations only with 4 Asian NIEs plus Malaysia. Although not reported in Table 3.4, the degree of positive and significant correlations improves much further if including 2008 and 2009 in the post-crisis period. Such an improvement of the extent of correlation is, however, mainly due to the effect of economic downturn caused by the global financial crisis since 2008.

The literature often examines the cross-country correlation of domestic price inflation as well for additional measurement of economic integration. The upper panels of Table 3.4 show the correlation matrix of CPI inflation. Interestingly, the improvement of cross-country correlation from the pre-crisis to the post-crisis period is not evident in the case of CPI inflation. While Japan, China, and the Philippines clearly increase the correlations with other Asian countries in the post-crisis period, the degree of correlations is likely to deteriorate among 4 Asian NIEs and 3 ASEAN countries.

Overall, business cycles in Asian countries have become more synchronized in recent years, which can be supported by analyzing the correlation in real shocks among Asian countries. Sato, Zhang and McAleer (2009) conduct the Blanchard and Quah (1989) structural decomposition method using a 2-variable VAR model including real GDP growth rate and CPI inflation rate, and present the results of cross-country correlation in identified supply shocks. They found that the degree of correlation in supply shocks improved substantially in the post-crisis period.

A more important question is whether the above findings of business cycle synchronization were driven by an autonomous development of the regional countries or by external economies. Sato,

Zhang and McAleer (2009) employ a multivariate VAR model with bloc exogeneity to allow for the effect of both US (global) shock and Japan's or China's (regional) shock on the real output fluctuations of Asian countries. By conducting the variance decomposition test and the impulse response function analysis, it is found that the real output fluctuations are affected more by disturbances from the US than those from Japan or China, suggesting a stronger linkage between Asia and external economies.<sup>1</sup>

### 3.5.2 Correlation in Financial markets

A popular approach of analyzing financial integration is to measure the extent of cross-border financial transactions quantitatively. Table 3.5 shows the matrix of international portfolio investment among the US, Japan, China, and other Asian countries. First, portfolio investment in Asian 9 countries plus China increased substantially from US\$339 billion in 2001 to US\$952 billion in 2008. Second, it is interesting to note that the largest source country for portfolio investment in Asian countries is the US that account for about 37 percent in the total investment in Asia as of 2008. Hong Kong, China, Singapore and Japan are also important sources of investment in many Asian economies, but their volumes of investment are far smaller than that of the US investment. Third, Japan's portfolio investment pattern differs markedly from those other Asian economies such as Hong Kong, China and Singapore. Specifically, Japan's portfolio investment is directed mainly to the US and other countries, not to Asian countries. For example, in 2008, the volume of the Japan's portfolio investment in the US is more than fifteen times larger than that in Asian countries. Although the data on investments from China are not reported in Table 3.5, China's portfolio investment in the US is estimated to be large. These observations indicate that Asia is financially integrated with the US in that the US is the largest source country of portfolio investment in Asia and also that Japan and, similarly, China make substantial portfolio investment in the US.

<sup>1</sup> Kim and Lee (2008) show that both regional and external (global) factors affect the real integration of Asian economies.



Table 3.5 Matrix of Portfolio Investment in Asian Countries/Regions in 2001 and 2008 (US Million Dollars)

Investment from:		Investment in:													Total value
Australia	Hong Kong, China	India	Indonesia	Japan	Korea, Republic of	Malaysia	Pakistan	Philippines	Russia	Singapore	Thailand	United States			
Japan	4,615	9,248	...	3	--	176	22	...	5	6	10,550	1	197,839	542,309	
China, People's Republic of	8,416	...	...	--	1,669	157	8	...	...	--	1,447	4	3,004	20,257	
Asia 9 Countries	3,671	14,687	...	149	19,884	1,405	778	...	119	--	20,610	251	122,033	318,320	
Korea, Republic of	429	5,100	...	--	5,835	--	11	...	7	--	3,216	--	34,475	76,781	
Hong Kong,China	2,185	--	...	107	6,116	406	75	...	25	--	4,747	125	32,047	96,690	
Taipei,China	177	2,095	...	--	476	8	21	...	13	--	1,327	1	19,860	41,093	
Singapore	779	2,685	...	40	2,133	152	471	...	62	--	...	106	22,818	50,695	
Malaysia	56	2,421	...	2	2,538	452	...	...	9	--	6,886	--	4,258	22,586	
Indonesia	14	--	...	...	158	75	51	...	3	--	867	15	1,841	5,547	
Thailand	21	1,147	...	--	1,038	179	36	...	1	--	2,361	--	2,698	12,010	
Philippines	8	1,239	...	...	1,560	110	102	...	...	--	1,181	1	4,015	12,726	
Vietnam	--	--	...	...	31	22	10	...	...	--	25	3	21	191	
United States	44,446	39,253	...	249	490,200	3,764	208	...	1,844	212	18,011	292	...	3,101,189	
Australia	--	18,575	...	55	19,180	52	22	...	10	--	7,743	9	55,183	169,912	
India	79	--	...	--	198	66	7	...	...	--	484	--	7,198	15,388	
Pakistan	--	--	...	...	14	--	--	...	...	--	...	--	180	469	
Russian Federation	11	--	...	...	128	3	8	...	...	--	...	--	10,208	26,255	
Total value of investment		79,352	205,600	...	717	1,289,754	8,034	2,279	...	2,135	1,315	105,241	825	2,303,603	12,710,853
<2008 Matrix>															
Japan	16,362	31,909	...	11	--	3,318	94	...	51	--	9,845	50	389,072	1,100,760	
China, People's Republic of	1,050	102,655	29	--	5,994	7,378	95	...	--	5	11,073	38	54,902	251,331	
Asia 9 Countries	8,279	32,330	115	430	42,788	10,090	5,231	...	315	26	62,691	7,094	230,782	700,205	
Korea, Republic of	1,505	15,349	26	9	18,061	--	954	...	--	12	19,752	6,497	56,056	204,284	
Hong Kong,China	3,201	--	46	108	10,127	7,765	1,555	...	106	14	16,529	167	64,816	180,243	
Taipei,China	848	3,259	11	--	1,642	343	250	...	--	--	3,593	6	41,418	84,144	
Singapore	1,316	6,164	18	299	6,424	736	1,759	...	178	--	...	300	30,481	86,875	
Malaysia	329	5,061	5	3	2,700	370	...	...	--	--	10,219	92	11,936	49,857	
Indonesia	175	503	4	...	1,102	257	294	...	--	--	6,566	25	11,160	40,227	
Thailand	368	826	5	10	1,157	169	210	...	31	--	3,209	--	7,619	28,820	
Philippines	537	720	--	1	1,554	40	196	...	...	--	1,533	2	7,097	21,335	
Vietnam	(c)	448	...	...	22	409	12	...	...	--	1,290	5	199	4,421	
United States	122,466	72,556	68	244	762,424	25,870	3,259	--	1,812	3,225	45,028	1,674	--	6,353,091	
Australia	--	34,129	3	14	64,595	1,106	170	...	--	780	18,794	947	145,542	522,227	
India	624	5,122	...	195	2,821	1,961	131	...	--	--	14,479	4	31,917	213,110	
Pakistan	3	74	...	...	22	3	...	...	--	--	--	--	631	3,045	
Russian Federation	271	196	...	--	1,653	549	538	...	--	--	333	25	24,616	76,726	
Total value		258,449	555,270	886	1,917	2,376,606	75,113	16,136	110	4,609	24,674	307,291	13,422	4,267,865	30,872,562

Notes: "--" and "..." indicate a zero or a value less than US\$500,000 and an unavailable datum, respectively. (c) indicates that a non-zero datum was not disclosed for reasons of confidentiality

Source: International Monetary Fund, Coordinated Portfolio Investment Survey (CPIS).

Another popular measure of financial integration is to test the interest parity condition. Kim and Lee (2008) test the covered interest parity between the Asian interest rate and the US or Japanese rate for the period of 2000-2007. Specifically, the mean of the covered interest rate differentials is calculated between each Asian country and the US. The same calculation is conducted between each Asian country and Japan. By comparing the mean of covered interest differentials, it is found that the differential with respect to the US rate is smaller than that to the Japanese rate.<sup>1</sup> Since the covered interest differential indicates the degree of financial market integration, Asian countries are more financially integrated with the US than Japan, which is considered as one of the key regional countries in Asia.

### 3.5.3 Potential Pitfalls of the Dollar Dominance

We have so far explored to what extent Asian countries have been integrated in terms of several measurements that are considered to be one of the major preconditions for establishing a currency area or a monetary union. Although regional economic integration has been deepening in Asia including Japan, the US influence on Asian integration is found to be substantially large. It is hard to say that regional integration has been driven mainly by autonomous development of Asian countries.

Let us confirm the above findings from the viewpoint of the Asian countries. A widely used method of revealing the exchange rate policy or the implicit basket weight is the Frankel and Wei (1994) regression. The daily exchange rate is used for the OLS estimation and the numeraire is the Swiss franc. The first-difference of the natural log of the Asian currency's exchange rate vis-à-vis the Swiss franc is regressed on the corresponding exchange rate of the US dollar, that of the euro, and that of the yen. The result is presented in Table 3.6.

First, the basket weight of the US dollar is significantly high in most countries. Even though

the US dollar peg policy was relinquished in 2005, the Chinese renminbi is still correlated significantly with the US dollar. Second, for the last 4 years, the role of the euro has been rising in the implicit basket weight of the Asian currencies. In the most recent sample period of 2008-2009, the statistically significant weight of the euro is observed in seven out of ten currencies, while the positive and significant weight of the yen is found only in the Hong Kong dollar. The Asian countries continue to stabilize their own currency against the US dollar, and the yen does not play a significant role in the regional countries' exchange rate policy.

To the extent that Asian countries depend heavily on the US economy as we observed above, the high share of the US dollar in their implicit basket weight may be a rational choice of their exchange rate policy. As the Chinese economy is growing as a destination market for regional countries' exports and if Japan becomes more integrated with the regional economies through trade and investment, however, the exchange rate risk in trade and financial transactions among the regional countries will not be completely avoided by stabilizing their currencies against the US dollar.<sup>2</sup> In other words, if regional development becomes less dependent on the US economy, it will be a more imminent concern for regional countries to avoid the exchange rate risk in intra-regional transactions. Ogawa and Shimizu (2006) propose to create an Asian Monetary Unit (AMU) to mitigate such exchange rate risks among Asian currencies and also to utilize the AMU Deviation Indicators to monitor the stability of Asian currencies. Whereas the influence of the US economy is still quite large, the coordinated action of adopting some regional monetary arrangements like AMU will become a more important policy agenda for Asian countries.

<sup>1</sup> De Brouwer (1999) and Sato (2007) report similar findings.

<sup>2</sup> The AMU and the AMU deviation indicators are available from the website of RIETI (<http://www.rieti.go.jp/en/>). See also Ito (2007) for a common basket currency in Asia.

**Table 3.6 Implicit Basket Weight of Asian Currencies**

		2000-01	2002-03	2004-05	2006-07	2008-09
Chinese Renminbi	US Dollar	0.998 **	0.999 **	0.972 **	0.963 **	0.980 **
	Euro	0.001	-0.010	-0.003	0.019	0.028 *
	Yen	0.001	0.001	0.045 **	0.003	0.003
	Adj.R <sup>2</sup>	0.99	0.99	0.98	0.97	0.99
Korean Won	US Dollar	0.909 **	0.674 **	0.722 **	0.790 **	0.854 **
	Euro	-0.049	0.150	0.112	0.357 **	0.738 **
	Yen	0.205 **	0.291 **	0.243 **	0.064	-0.337 **
	Adj.R <sup>2</sup>	0.75	0.57	0.70	0.60	0.29
Hong Kong Dollar	US Dollar	0.999 **	0.993 **	0.981 **	0.989 **	0.991 **
	Euro	0.003	0.009	0.018 **	0.002	0.001
	Yen	0.000	0.009	0.013 **	0.007 *	0.005 **
	Adj.R <sup>2</sup>	0.99	0.99	0.99	0.99	0.99
Taiwan Dollar	US Dollar	0.97 **	0.89 **	0.83 **	0.86 **	0.87 **
	Euro	0.06	0.01	0.10	0.16 *	0.19 **
	Yen	-0.01	0.09 **	0.13 **	0.07 **	-0.02
	Adj.R <sup>2</sup>	0.87	0.92	0.83	0.80	0.85
Singapore Dollar	US Dollar	0.81 **	0.65 **	0.59 **	0.61 **	0.67 **
	Euro	0.07	0.09 *	0.19 **	0.56 **	0.41 **
	Yen	0.16 **	0.25 **	0.29 **	0.10 **	-0.03
	Adj.R <sup>2</sup>	0.89	0.86	0.89	0.79	0.84
Malaysia Ringgit	US Dollar	0.99 **	1.00 **	1.00 **	0.82 **	0.87 **
	Euro	0.01	0.00	0.01	0.42 **	0.22 **
	Yen	0.01	0.00	-0.01	0.01	-0.05 *
	Adj.R <sup>2</sup>	0.99	0.99	0.99	0.76	0.79
Indonesia Rupiah	US Dollar	0.967 **	0.828 **	0.745 **	0.642 **	0.871 **
	Euro	-0.101	0.079	0.102	0.776 **	0.461 **
	Yen	0.029 **	0.125 *	0.188 **	0.073	-0.033
	Adj.R <sup>2</sup>	0.20	0.48	0.49	0.35	0.56
Thai Baht	US Dollar	0.827 **	0.707 **	0.682 **	0.790 **	0.860 **
	Euro	0.055	0.110	0.142 *	0.213	0.226 **
	Yen	0.160 **	0.250 **	0.297 **	0.085	0.012
	Adj.R <sup>2</sup>	0.78	0.81	0.87	0.26	0.79
Philippine Peso	US Dollar	0.861 **	0.922 **	0.953 **	0.876 **	0.915 **
	Euro	0.071	-0.033	0.049	0.338 **	0.282 **
	Yen	0.133 *	0.056 *	0.048 *	0.017	-0.072 *
	Adj.R <sup>2</sup>	0.40	0.82	0.90	0.62	0.75
Vietnam Dong	US Dollar	n.a.	n.a.	0.888 **	0.996 **	1.053 **
	Euro	n.a.	n.a.	0.262	0.028	-0.058
	Yen	n.a.	n.a.	0.085	-0.038	0.004
	Adj.R <sup>2</sup>	n.a.	n.a.	0.59	0.45	0.47

**Notes:** Daily series of exchange rate vis-à-vis the Swiss franc is used for estimation. Painted figures indicate the statistically significant coefficient. Double asterisks (\*\*) and a single asterisk (\*), respectively, denote the 1 percent and 5 percent significance level.

**Source:** The data is obtained from the Pacific Exchange Rate Service and estimation by Kiyotaka Sato.



# Chapter 4

## The Copenhagen Meeting and the Environment: A New Challenge for Cooperation in Asia

### 4.1 Joint Efforts of China and India at the Meeting

The environmental issues could affect many countries simultaneously, they are no longer national issues but international or regional issues. This provides great opportunities to many Asian countries and related countries to cooperate and find solution. Recognizing the severity and urgency of these issues, many of the Asian countries are willing to unite together and more or less speak with one voice in international meetings related to the environment. The recent example is the Copenhagen Meeting.

One of the earliest efforts of the world community to protect the environment was the establishment of the United Nations Framework Convention on Climate Change (UNFCCC), which aims to reduce global warming and to cope with the climate change. The Conference of the Parties (COP) is the topmost agency.<sup>1</sup> Since 1995, 15 COP conferences have been held in different parts of the world. They are briefly described in Table 4.1.

<sup>1</sup> The COP also serves as the Meeting of the Parties to the Kyoto Protocol (CMP or COP/MOP), holding concurrent annual conferences of the countries that have ratified the Kyoto Protocol. The Clean Development Mechanism (CDM) Executive Board is an agency under the Kyoto Protocol that monitors Clean Development Mechanism projects.

**Table 4.1 Information about the 15 COP Conferences**

COP	Place	Year	Main Achievement
COP1	Berlin	1995	"The Berlin Mandate", which set a two-year analysis and evaluation phase
COP2	Geneva	1996	Member countries not required to pursue uniform solution
COP3	Kyoto	1997	The Kyoto Protocol approved, setting binding targets for greenhouse gas emission in 37 industrialized countries from 2008 to 2012
COP4	Buenos Aires	1998	A two-year period scheduled to clarify and develop tools for implementing the Kyoto Protocol
COP5	Bonn	1999	Technical discussions concerning mechanisms under the Kyoto Protocol
COP6	Hague	2000	Negotiation about the US's proposal to let agricultural and forest areas be included as carbon sinks broke down

COP	Place	Year	Main Achievement
COP6 bis	Bonn	2001	Several principles approved, including the flexible mechanisms that enable gas emission reduction obligations to be traded for financial compensation
COP7	Marrakesh	2001	Approved the Marrakesh Accords, which (almost) completed the Kyoto Protocol
COP8	Delhi	2002	EU's attempt to get a declaration passed, calling for more action from the parties under the UNFCCC unsuccessfully
COP9	Milan	2003	To clear up some of the last technical details concerning the Kyoto Protocol
COP10	Buenos Aires	2004	Discussions about what would happen when the Kyoto Protocol expired in 2012
COP11/CMP1	Montreal	2005	Continued the discussion of what should happen after the expiry of the Kyoto Protocol in 2012
COP12/CMP2	Nairobi	2006	Some technical questions regarding the Kyoto Protocol answered; more discussion of what should happen after the expiry of the Kyoto Protocol in 2012
COP13/CMP3	Bali	2007	The Bali Action Plan adopted
COP14/CMP4	Poznan	2008	An agreement on the work program and meeting plan towards the Copenhagen conference and on the final operationalization of the Adaptation Fund
COP15/CMP5	Copenhagen	2009	The Copenhagen Accord

The Copenhagen Summit, which was the COP15 and CMP5, was held in Copenhagen, Denmark from December 7-18, 2009. An agreement, often called the Copenhagen Accord, was drawn up by leaders from the US, China, India, Brazil, and South Africa. This is one of the few occasions in which some Asian countries (China and Indian this time) took an active and same position in an international meeting. The achievements of the Copenhagen Accord are historical for three reasons. Firstly, the parties accepted that global warming was occurring because of human activity. Secondly, it was recognized that developed countries are principally responsible for the current high levels of GHG in the atmosphere as a result of more than 150 years of industrial activity. The spirit of the Kyoto Protocol that places a heavier burden on developed nations under the principle of "common but differentiated responsibilities" is accepted. Thirdly, the developing world needed a large infusion of capital to move towards a less carbon-intensive

strategy of development as well as to cope with the consequences of global warming.

## 4.2 Environmental Situation in Asia

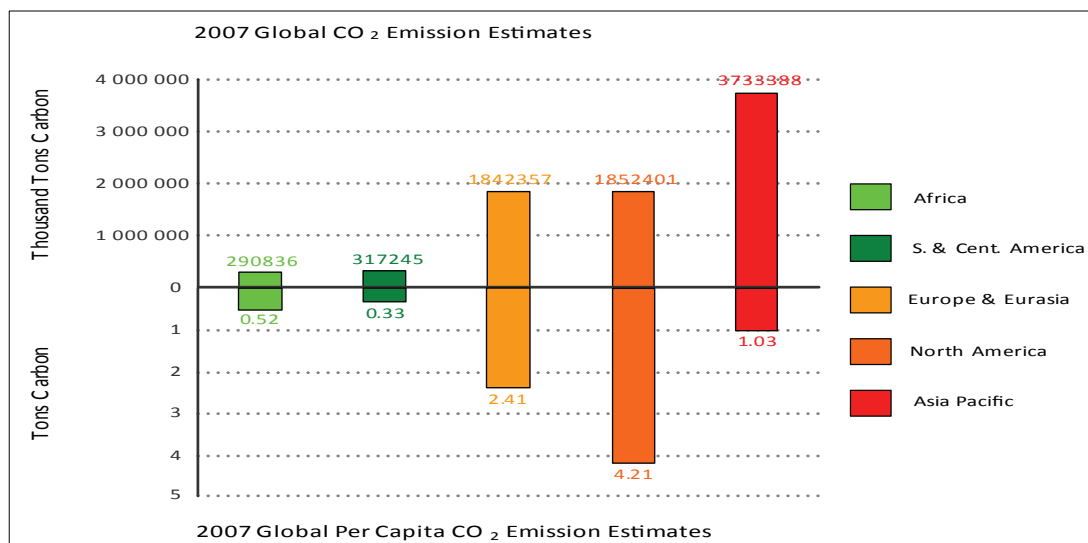
Asia is recognized as one of the most dynamic and fast growing regions in the world. This section examines whether Asia is paying a price in terms of environment for its fast growth. More specifically, this section discusses carbon dioxide emission, climate warming, and impacts of climate changes in Asia.

### Carbon dioxide emission in Asia

Rapid economic growth, increases in personal vehicle ownership, and the explosion of population lead to substantial consumption of fossil energy in Asia. Substantial emission of greenhouse gases, especially CO<sub>2</sub>, in the course of economic growth represents the biggest challenge to Asia. Figure 4.1 compares the CO<sub>2</sub> emissions in different regions of

the world in 2007. In absolute terms, the Asia-Pacific region had the largest CO<sub>2</sub> emission, constituting about half of the world's total. In a per capita sense,

North America was the biggest contributor, followed by Europe and Eurasia. The Asia Pacific region accounted for about a quarter of the world's total.

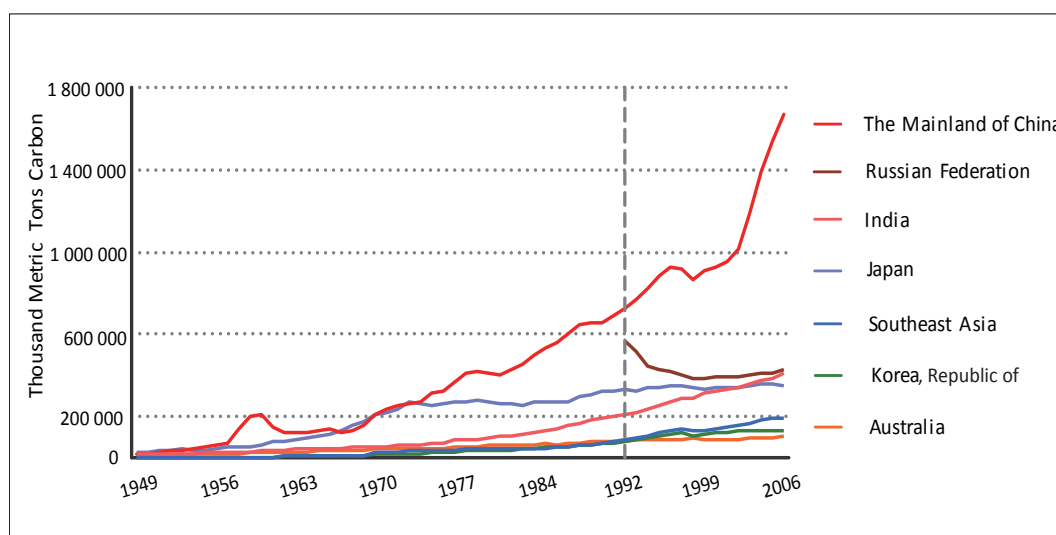


**Figure 4.1 CO<sub>2</sub> Emission in Asia Pacific Compared with Other Regions**

Source: CDIAC.

There is no doubt that many Asian countries, in the course of their growth, had increasing emissions of GHG, especially carbon dioxide. Figure

4.2 compares the growth of CO<sub>2</sub> emissions by China, India, Japan, and other major economies in the Asia-Pacific region in the period from 1949 to 2006.



**Figure 4.2 CO<sub>2</sub> Emission in Selected Countries in the Asia-Pacific Region, 1949-2006**

Note: Southeast Asia includes Malaysia, Philippines, Singapore, Thailand, and Vietnam.

Source: CDIAC.

Needless to say, with its fast and extensive economic development in the past decades, and because of its size, China is the fastest growing and the largest source of CO<sub>2</sub> emission in the region. Russia, India, Japan, and the five major economies in Southeast Asia are also crucial sources of CO<sub>2</sub> emission. Attention should be drawn to these emission trends, which could lead to climate changes, damaging the ecological environment, agriculture, and human health in Asia.

### ***Climate Warming in Asia***

IPCC (2007) indicates that the global average temperature has been rising since the mid-20th century due to the increase in anthropogenic greenhouse gas concentration. In Asia, there was evidence that surface air temperature has been increasing. In recent decades, surface temperature rose by less than 1° to 3°C per century in some parts of Asia, while in Russia, surface temperature increased 2° to 3°C in the past 90 years, more pronounced in the spring and the winter, and more severe in the Mongolian area: annual mean temperatures have risen by 1.8°C from 1940 to 2003 (AIACC, 2006). In China, the climate has been getting warmer in the previous 50 years, and the rate of increase is more pronounced in the minimum than in the maximum temperature. In Japan, the average temperature rose up by about 1°C during the 20th century, or 2° to 3°C in large cities. In India, temperature increased 0.68°C per century and the upward trend in annual mean temperature was more severe during the post-monsoon and the winter seasons.

### ***Hydrology and water resources***

Climate change has the potential to exacerbate water resource stress in many countries of Asia and the Pacific (IPCC, 2007). There are reports of unprecedented glacier retreats in the Himalayan Highlands over the past decade (WWF, 2005). Furthermore, climatic variability and natural disasters have threatened watershed quality in recent years, causing damage to sanitation facilities and the contamination of groundwater (UNEP, 2002).

The melting glaciers supplies more than 10% of freshwater in drier parts of Asia. (Meshcherskaya and Blazhevich, 1990; Fitzharris, 1996; Meier, 1998). Pu, et al. (2004) report that glaciers in Asia are melting faster in recent years than before. As a result of rapid melting of glaciers, glacial runoff and frequency of glacial lake outbursts causing

mudflows and avalanches have increased (Bhadra, 2002; WWF, 2005).

Climate change increasingly influences the water supply of some countries in arid Central and West Asia. In parts of China, the rise in temperature and decreases in precipitation, along with increasing water use have caused water shortages that led to drying up of lakes and rivers (Liu and Chen, 2006; Wang and Jin, 2006). In India, Pakistan, Nepal, and Bangladesh, water shortages have been attributed to rapid urbanization and industrialization, population growth, and inefficient water use. These are aggravated by changing climate and its adverse impacts on demand, supply, and water quality.

### ***Agriculture and food production***

At lower latitudes, especially in seasonally dry and tropical regions, crop productivity is projected to decrease due to even small local temperature increases (1° to 2°C), which would increase the risk of hunger (IPCC, 2007). Agricultural production and food security cause growing concerns in dry lands of the Himalayas, Central, and West Asia, and Southern India (ADB, 2009a). Some studies show that the increasing water stress, arising partly from increasing temperature, increasing frequency of El Niño, and reduction in the number of rainy days has resulted in a decline of the production of rice, maize and wheat in the past few decades in many parts of Asia. Peng, et al. (2004) find that the yield of rice decreased by 10 percent for every 1°C increase in growing-season minimum temperature. Climate change could make it more difficult than it is already to step up the agricultural production to meet the growing demands in Russia (Izrael and Sirotenko, 2003) and other developing countries in Asia.

### ***Oceans and coastal zones***

Global warming and sea-level rise in the coastal zone of Boreal Asia have influenced sea-ice formation and decay, the thermo-abrasion process, permafrost and the time of river freeze-up and break-up in recent decades (ACIA, 2005; Leont'yev, 2004). Severe droughts and unregulated groundwater withdrawal have resulted in sea-water intrusion in the coastal plains of China (Ding, et al., 2004). It was reported that salt water from the Bay of Bengal has penetrated 100 km or more inland along tributary channels during the dry season (Allison, et al., 2003).

Largely due to coral bleaching induced by the 1997/98 El Niño event, over 34 percent of the coral



reefs of Asia, particularly in South, Southeast and East Asia have been lost since 1998. The destructive effects of climate change compound the human-induced damages on the corals in this region. A substantial portion of the vast mangroves in the South and Southeast Asian regions has also been reportedly lost during the last 50 years of the 20th century, largely attributed to human activities (Zafar, 2005). Evidence of the impacts of climate-related factors on mangroves remains limited to the severe destruction of mangroves due to reduction of freshwater flows and salt-water intrusion in the Indus delta and Bangladesh (IUCN, 2003).

### Natural ecosystems

Increasing intensity and spread of forest fires in Asia have been observed in the past 20 years, largely attributed to the rise in temperature and decline in precipitation in combination with increasing intensity of land uses. Recent studies have also shown a dramatic increase of fires in Siberian peatlands linked to increased human activities combined with changing climate conditions, particularly the increase in temperature. Page, et al. (2002) estimated that between 0.81 and 2.57 Gt of carbon were released to the atmosphere during the 1997 to 1998 El Niño dry season as a result of burning peat and vegetation in Indonesia. This is equivalent to 13 to 40 percent of the mean annual global carbon emissions from fossil fuels, and contributed greatly to the largest annual increase in atmospheric CO<sub>2</sub> concentration detected since records began in 1957. In the past ten years about three million hectares of peatland in Southeast Asia have been burnt, releasing between 3 to 5 PgC, and drainage of peat has affected an additional six million hectares and released a further 1 to 2 PgC. As a consequence of a 17 percent decline in spring

precipitation and a rise in surface temperature by 1.5°C during the last 60 years, the frequency and aerial extent of the forest and steppe fires in Mongolia have significantly increased over a period of 50 years (Erdnethuya, 2003).

The increasing aridity in Central and West Asia in recent years has been reducing growth of grasslands and increasing bareness of the ground surface with the gradual reduction in rainfall during the growing season for grass (Bou-Zeid and El-Fadel, 2002). Wetlands in Asia are being increasingly threatened by warmer climate in recent decades. The precipitation decline and droughts in most delta regions of Pakistan, Bangladesh, India and China have resulted in the drying up of wetlands and severe degradation of ecosystems. In the wetlands of the Sanjiang Plain, the precipitation during the period 1955 to 1999 decreased by 210~215 mm per year and it caused many wetlands to dry up. The wetland ecosystem was severely degraded and much of the degradation process is not reversible (Pan et al., 2003).

### Biodiversity

Though evidence of climate-related biodiversity loss in Asia remains limited, a large number of plant and animal species are reported to be moving to higher latitudes and altitudes as a consequence of observed climate change in many parts of Asia in recent years (Yoshio and Ishi, 2001; IUCN, 2003). The habitat degradation and destruction threaten important and valuable species, and increase the loss of biodiversity in Asia (See Table 4.2). Biodiversity in Asia is being lost as a result of development activities and land degradation, pollution, over-fishing, hunting, infrastructure development, species invasion, land-use change, climate change and the overuse of freshwater (UNEP, 2002).

**Table 4.2 Threatened Species by Sub-region**

Classification	North East Asia	South Asia	South-East Asia	Central Asia	South Pacific	Total
Mammals	175	207	455	45	119	1001
Birds	274	204	466	46	270	1260
Reptiles	55	64	171	6	63	359
Amphibians	125	128	192	0	13	458
Fishes	153	110	350	19	186	818
Molluscs	28	2	27	0	99	156
Other Invertebrates	32	78	49	11	15	185
Plants	541	538	1772	4	534	3389

Source: UNEP, 2007.

### Human health

In South Asia, endemic morbidity and mortality due to diarrhea disease is linked to poverty and hygiene behavior compounded by the effect of high temperatures on bacterial proliferation (Checkley, etl 2000). A large number of deaths due to heat waves (mainly among the poor, elderly and laborers such as rural daily wage earners, agricultural workers, and rickshaw pullers) have been reported in the Indian state of Andhra Pradesh, Orissa, and elsewhere during the past five years (Lal, 2002). Serious health risks associated with extreme summer temperatures and heat waves have also been reported in Siberian cities (Zolotov and Caliberny, 2004).

## 4.3 Efforts of Various Asian Governments

The 2009 Copenhagen Meeting and the Copenhagen Accord represent some of the recent efforts of Asian governments to improve the environmental situation in the world. While the Copenhagen Accord was written by five countries, China, India, and South Africa, and the US, recently 55 countries have pledged emission cuts to the UN under the Copenhagen Accord.<sup>1</sup> These countries account for 78 percent of global emissions from energy use, according to a UNFCCC release. (See Table 4.3)

As a matter of fact, many Asian governments have made similar efforts before the Copenhagen Meeting. This section describes some of these efforts.

### Japan

As an industrialized country, Japan submitted its greenhouse gas reduction target in the UN Climate Change Conference on September 22, 2009 in New York. Japan will be committed to cut GHG emissions by 25 percent by 2020 from its 1990 levels. The target is premised on the establishment of a fair and effective international framework in which all major economies participate and set similar targets.

Furthermore, the new environmental minister, Ozawa, plans to introduce cap-and-trade in 2011 and the eco-tax within four years. The revenue of the eco-tax will be spent on the development and diffusion of renewable energy and energy saving technologies.

<sup>1</sup> It represents the first time that large emerging economies such as China and India have made written commitments to the international community that they will curb their carbon emissions.

### Republic of Korea

As the fourth largest energy consumption country in Asia, Korea announced just before the climate talks in Copenhagen that it will cut greenhouse gas emissions by 30 percent below the expected levels in 2020, equivalent to a reduction of 4 percent from 2005 levels. It will also promote environment-friendly investment and development. This is one of the most aggressive targets in the non-Annex I countries.

Korea also plans to use property, automobile, and energy-carbon taxes to reduce greenhouse gas emissions and promote green growth. It will also push for a "cap and trade" legislation and provide support for ten key green technologies, including carbon capture and storage, a smart grid and next-generation batteries.<sup>2</sup>

The Korean Government prepared for a variety of measures of the Green Growth in 2009 and will put those plans into action. Although some companies voiced their worries on the policy direction and many of the Korean companies are newcomers to green industries, Korean companies have been quite supportive of the Green Growth initiative. A total of 640 Korean companies will start participating in a voluntary pilot carbon emissions trading system from 2010.

The Government also plans to establish the Global Green Growth Institute (GGGI) in Seoul in the first half of 2010 to help countries share their policy experiences on climate change and to enhance their worldwide Green Growth strategies.

### People's Republic of China

Large developing countries like Brazil, India, South Africa, Indonesia, and China also submitted their nationally appropriate mitigation actions (NAMAs) to the UNFCCC, pledging to voluntarily lower its carbon emissions per unit of GDP by 40 to 45 percent below the 2005 levels by 2020.<sup>3</sup>

China, with less historical cumulative emissions and current low per capita emissions, priority is sustainable development. China's climate policy

<sup>2</sup> A smart grid system enables homes and factories to use electricity during off-peak hours through a two-way communication between power suppliers and consumers. Korea established a major test-bed facility for the smart grid system on Jeju Island in 2009, which will be completed by 2013.

<sup>3</sup> BASIC group (China, Brazil, South Africa, and India) and two of the largest developing country emitters with India, China submitted their greenhouse gas reduction targets but made no specific formal mention of the Copenhagen Accord in their submissions.

**Table 4.3 The Copenhagen-Accord Related Emissions Reduction Targets by 2020 (%)**

	CO <sub>2</sub> emissions relative to				Carbon intensity relative to
	1990 level	2000 level	2005 level	2020 BAU*	2005 level
EU states	20				
Norway	40				
Croatia	5				
US			17		
Canada			17		
Moldova	25				
South Africa				34	
Brazil				38.9	
Russia	25				
Japan	25				
Australia		25			
New Zealand	20				
Korea, Republic of				30	
Indonesia				26	
Singapore				16	
China, People's Republic of					45
India					25

\* BAU=Business as usual case with no climate policy

Source: UNFCCC, 2010

meshes with concerns about energy itself, as well as the impacts of climate change and China's international reputation. China's approach is diverse and includes targets and quotas, industrial and equipment standards, energy taxes, and financial incentives and penalties.

The Chinese Government believes in a green economic future. It recognizes that the world is adopting new energy sources and technologies including renewable energies, and it wants to compete in this new energy technology market. China is also interested in protecting its global image by taking action. President Hu Jintao has listed climate change as one of the areas where China must engage with the world community as part of the 'peaceful development' approach to international relations.

Until the accounting is developed, and until its financial markets further develop, China will not be in a position to implement an effective national cap-and-trade system. Representing many of the developing countries, China will continue to appeal to the Annex I group to fulfill their commitments under the Copenhagen Accord to provide financial assistance and technology transfer/cooperation to developing countries so as to enhance their

mitigation, adaptation, and capacity-building to climate change.

### India

India submitted to the UN its proposed target: to cut emission intensity by 20 to 25 percent by 2020. The BASIC group (China, Brazil, South Africa, and India) is emerging as an alternative climate forum. The group met in New Delhi in January 2010 and pledged to submit their action plans to cut greenhouse gas emissions. It is also seeking to cement their alliance, raise climate funding, enhance forest protection, and independently verify emission reductions.

### Indonesia

As the third largest greenhouse gas emitter in Asia if deforestation is included, Indonesia has pledged to protect and rehabilitate 21,135,000 hectares of land over the next ten years, cutting emissions up to 30 percent by 2020 by protecting and planting trees. A timetable for developing sound REDD (reducing emissions from deforestation and degradation) methodologies has also been set to achieve the project-implementation stage in 2013. Indonesia's climate policy strategies include actions to develop geothermal power, drive energy efficiency, and reduce deforestation.

### **Australia**

The Australian Government's goal is to cut emissions by 2020. A recent study shows that the Treasury predicts Australia's emissions will increase to 774 million tonnes by 2020 from 553 million tonnes in 2000. However, the Government's minimum 5 percent greenhouse gas emissions reduction target based on 2000 levels means that the country's emissions would need to be capped at 525 million tonnes by the end of the decade. The Australian reported that the Government's goal will be out of reach, particularly given such factors as population growth projections, loopholes providing free

permits to big polluters and a refusal to consider nuclear power.

### **New Zealand**

The New Zealand Government has expressed its willingness to support the Copenhagen Accord. New Zealand officially submitted to the Accord its target of reducing greenhouse gas emissions to 10 to 20 percent below the 1990 levels by 2020.

The ruling national parties think that the Accord is a constructive step forward to developing a comprehensive global deal on climate change. If New Zealand maintains its pledge, all major countries are expected to set similar targets.

# Appendix I

## Chronological Dates of Economic Integration Agreements in Asia

		With	Coverage	Dates Signed	Dates Enforced	Under negotiation	Proposed/ Under Consultation and Study
North East Asia	China, People's Republic of	APTA	G	1975.7.31	1976.6.17		
		Thailand	NA	NA	2003.9.30		
		Hong Kong, China	G & S	2003.6.29	2004.1.1		
		ASEAN (G)	G	2004.11.29	2005.7.1		
		ASEAN (S)	S	2007.1.14	2007.7.1		
		Macao, China	G & S	2003.10.17	2004.1.1		
		Chile	G	2005.11.18	2006.10.1		
		Pakistan	G	2006.11.24	2007.7.1		
		New Zealand	G & S	2008.4.7	2008.10.1		
		Singapore	G & S	2008.10.23	2009.1.1		
		Peru	NA	2009.4.28	.		
		SACU				2004.6.28	
		GCC				2005.4.23	
		Australia				2005.5.23	
		Iceland				2006.4.12	
		Norway	G & S			2009.5.31	
		Costa Rica				2009.1.21	
		Korea-Japan					2002.11.30
		India					2003.6.23
		Korea, Republic of					2006.3.22
		SCO					2003.9.23
		South Africa					2004.6.29
		ASEAN+3					2004.11.29
		ASEAN+6					2005.12.14
		Switzerland					2009.11.30

		With	Coverage	Dates Signed	Dates Enforced	Under negotiation	Proposed/ Under Consultation and Study
	Hong Kong, China	China, People's Republic of	G & S	2003.6.29	2004.1.1		
		New Zealand				2001.6.30	
	Korea, Republic of	APTA	G	1975.7.31	1976.6.17		
		Chile	G & S	2003.2.15	2004.4.1		
		Singapore	G & S	2005.8.4	2006.3.2		
		EFTA	G & S	2005.12.15	2006.9.1		
		ASEAN (G)	G	2006.8.24	2007.6.1		
		US	G & S	2007.6.30	.		
		ASEAN (S)	S	2007.11.21	2009.5.1		
		India	G & S	2009.8.7	2010.1.1		
		EU	G & S	2009.10.15	.		
		Japan				2003.11.30	
		Canada				2005.7.28	
		Mexico				2006.1.31	
		New Zealand				2008.9.29	
		Australia				2008.10.1	
		GCC				2009.3.9	
		Peru				2009.3.20	
		Colombia				2009.12.7	
		Japan-China					2002.11.30
		Thailand					2003.8.23
		Malaysia					2004.7.31
		MERCOSUR					2004.11.16
		ASEAN+3					2004.11.29
		South Africa					2005.6.29
		ASEAN+6					2005.12.14
		China, People's Republic of					2006.3.22
		Russia					2007.10
		Turkey					2008.6
	Japan	Singapore	G & S	2002.1.13	2002.11.30		
		Mexico	G & S	2004.9.17	2005.4.1		
		Malaysia	G & S	2005.12.13	2006.7.13		
		Philippines	G & S	2006.9.9	2008.12.11		
		Chile	G & S	2007.3. 27.	2007.9.3		
		Thailand	G & S	2007.4. 3.	2007.11.1		
		Brunei Darussalam	NA	2007.6. 18	2008.7.31		
		Indonesia	G & S	2007.8.20	2008.7.1		
		ASEAN	G	2008.4.14	2008.12.1		
		Viet Nam	G & S	2008.12.25	2009.10.1		
		Switzerland	G & S	2009.2.19	2009.9.1		
		Korea, Republic of				2003.11.30	
		GCC				2006.9.21	

		With	Coverage	Dates Signed	Dates Enforced	Under negotiation	Proposed/ Under Consultation and Study
		India				2007.1.31	
		Australia				2007.4.23	
		Peru				2009.5.25	
		China-Korea					2002.11.30
		ASEAN+3					2004.11.29
		Canada					2005.1.19
		ASEAN+6					2005.12.14
	Taipei, China	Panama	G and S	2003.8.21	2004.1.1		
		Guatemala	NA	2005.9.22	2006.7.1		
		Nicaragua	G & S	2006.6.23	2008.1.1		
		El Salvador-Honduras	NA	2007.5.7	2008.7.30		
		Paraguay				2004.8.1	
		Dominican Republic				2006.10.27	
		US					2001.11.30
South East Asia	ASEAN	AFTA	G	1992.1.28	1993.1.1		
		ASEAN-China (G)	G	2004.11.29	2005.7.1		
		ASEAN-Korea (G)	G	2006.8.24	2007.6.1		
		ASEAN-China (S)	S	2007.1.14	2007.7.1		
		ASEAN-Korea (S)	S	2007.11.21	2009.5.1		
		ASEAN-Japan	G	2008.4.14	2008.12.1		
		ASEAN-Australia and New Zealand		2009.2.27	2010.1.1		
		ASEAN-India		2009.8.13	2010.1.1		
		ASEAN-EU				2007.5.5	
		ASEAN+3					2004.11.29
		ASEAN+6					2005.12.14
	Brunei Darussalam	AFTA	G	1992.1.28	1993.1.1		
		ASEAN-China (G)	G	2004.11.29	2005.7.1		
		TPP	NA	2005.7.18	2006.5.28		
		ASEAN-Korea (G)	G	2006.8.24	2007.6.1		
		ASEAN-China (S)	S	2007.1.14	2007.7.1		
		Japan	NA	2007.6.18	2008.7.31		
		ASEAN-Korea (S)	S	2007.11.21	2009.5.1		

		With	Coverage	Dates Signed	Dates Enforced	Under negotiation	Proposed/ Under Consultation and Study
		ASEAN-Japan	G	2008.4.14	2008.12.1		
		ASEAN-Australia and New Zealand	G	2009.2.27	2010.1.1		
		ASEAN-India	NA	2009.8.13	2010.1.1		
		ASEAN-EU				2007.5.5	
		ASEAN+3					2004.11.29
		ASEAN+6					2005.12.14
		U.S.					2002.12.16
		Pakistan					2007.7.31
	Cambodia	AFTA	G	1992.1.28	1993.1.1		
		ASEAN-China (G)	G	2004.11.29	2005.7.1		
		ASEAN-Korea (G)	G	2006.8.24	2007.6.1		
		ASEAN-China (S)	S	2007.1.14	2007.7.1		
		ASEAN-Korea (S)	S	2007.11.21	2009.5.1		
		ASEAN-Japan	G	2008.4.14	2008.12.1		
		ASEAN-Australia and New Zealand	G	2009.2.27	2010.1.1		
		ASEAN-India	NA	2009.8.13	2010.1.1		
		ASEAN-EU				2007.5.5	
		ASEAN+3					2004.11.29
		ASEAN+6					2005.12.14
	Indonesia	AFTA	G	1992.1.28	1993.1.1		
		ASEAN-China (G)	G	2004.11.29	2005.7.1		
		ASEAN-China (S)	S	2007.1.14	2007.7.1		
		ASEAN-Korea (G)	G	2006.8.24	2007.6.1		
		Japan	G & S	2007.8.20	2008.7.1		
		ASEAN-Korea (S)	S	2007.11.21	2009.5.1		
		ASEAN-Japan	G	2008.4.14	2008.12.1		
		ASEAN-Australia and New Zealand	G	2009.2.27	2010.1.1		
		ASEAN-India	NA	2009.8.13	2010.1.1		
		D-8 PTA	NA	2006.5.13	.		



		With	Coverage	Dates Signed	Dates Enforced	Under negotiation	Proposed/ Under Consultation and Study
		GSTIP	G	1988.4.13	1989.4.19		
		Pakistan				2005.11.24	
		ASEAN-EU				2007.5.5	
		US					1996.11.30
		ASEAN+3					2004.11.29
		India					2005.8.8
		EFTA					2005.11.29
		ASEAN+6					2005.12.14
		Australia					2007.7.31
	Laos	APTA	G	1975.7.31	1976.6.17		
		Thailand	NA	NA	1991.6.20		
		AFTA	G	1992.1.28	1993.1.1		
		ASEAN-China (G)	G	2004.11.29	2005.7.1		
		ASEAN-Korea (G)	G	2006.8.24	2007.6.1		
		ASEAN-China (S)	S	2007.1.14	2007.7.1		
		ASEAN-Korea (S)	S	2007.11.21	2009.5.1		
		ASEAN-Japan	G	2008.4.14	2008.12.1		
		ASEAN-Australia and New Zealand	G	2009.2.27	2010.1.1		
		ASEAN-India	NA	2009.8.13	2010.1.1		
		ASEAN-EU				2007.5.5	
		ASEAN+3					2004.11.29
		ASEAN+6					2005.12.14
	Malaysia	GSTP	G	1988.4.13	1989.4.19		
		AFTA	G	1992.1.28	1993.1.1		
		ASEAN-China (G)	G	2004.11.29	2005.7.1		
		Japan	G & S	2005.12.13	2006.7.13		
		ASEAN-Korea (G)	G	2006.8.24	2007.6.1		
		ASEAN-China (S)	S	2007.1.14	2007.7.1		
		Pakistan	G & S	2007.11.8	2008.1.1		
		ASEAN-Korea (S)	S	2007.11.21	2009.5.1		
		ASEAN-Japan	G	2008.4.14	2008.12.1		
		ASEAN-Australia and New Zealand		2009.2.27	2010.1.1		
		ASEAN-India		2009.8.13	2010.1.1		

		With	Coverage	Dates Signed	Dates Enforced	Under negotiation	Proposed/ Under Consultation and Study
		New Zealand		2009.10.26	.		
		D-8 PTA		2006.5.13	.		
		TPS-OIC				2004.3.31	
		ASEAN-EU				2007.5.5	
		Australia				2005.5.19	
		U.S.				2006.6.12	
		Chile				2007.6.5	
		India				2007.12.31	
		Korea, Republic of					2004.7.31
		ASEAN+3					2004.11.29
		ASEAN+6					2005.12.14
	Myanmar	GSTP	G	1988.4.13	198.4.19		
		AFTA	G	1992.1.28	1993.1.1		
		ASEAN-China (G)	G	2004.11.29	2005.7.1		
		ASEAN-Korea (G)	G	2006.8.24	2007.6.1		
		ASEAN-China (S)	S	2007.1.14	2007.7.1		
		ASEAN-Korea (S)	S	2007.11.21	2009.5.1		
		ASEAN-Japan	G	2008.4.14	2008.12.1		
		ASEAN-Australia and New Zealand	NA	2009.2.27	2010.1.1		
		ASEAN-India	NA	2009.8.13	2010.1.1		
		ASEAN-EU	NA			2007.5.5	
		BIMSTEC	G			2004.9.7	
		ASEAN+3					2004.11.29
		ASEAN+6					2005.12.14
	Philippines	PTN	G	1971.12.8	1973.2.11		
		AFTA	G	1992.1.28	1993.1.1		
		ASEAN-China (G)	G	2004.11.29	2005.7.1		
		ASEAN-China (S)	S	2007.1.14	2007.7.1		
		ASEAN-Korea (G)	G	2006.8.24	2007.6.1		
		Japan	G & S	2006.9.9	2008.12.11		
		ASEAN-Korea (S)	S	2007.11.21	2009.5.1		
		ASEAN-Japan	NA	2008.4.14	2008.12.1		

		With	Coverage	Dates Signed	Dates Enforced	Under negotiation	Proposed/ Under Consultation and Study
		ASEAN-Australia and New Zealand	NA	2009.2.27	2010.1.1		
		ASEAN-India	NA	2009.8.13	2010.1.1		
		U.S.				1988.11.30	
		ASEAN-EU				2007.5.5	
		Pakistan					2004.4.1
		ASEAN+3					2004.11.29
		ASEAN+6					2005.12.14
	Singapore	AFTA	G	1992.1.28	1993.1.1		
		ASEAN-China (G)	G	2004.11.29	2005.7.1		
		ASEAN-Korea (G)	G	2006.8.24	2007.6.1		
		ASEAN-China (S)	S	2007.1.14	2007.7.1		
		ASEAN-Korea (S)	S	2007.11.21	2009.5.1		
		ASEAN-Japan	G	2008.4.14	2008.12.1		
		ASEAN-Australia and New Zealand	G	2009.2.27	2010.1.1		
		ASEAN-India	G	2009.8.13	2010.1.1		
		New Zealand	G & S	2000.11.14	2001.1.1		
		Japan	G & S	2002.1.13	2002.11.30		
		EFTA	G & S	2002.2.26	2003.1.1		
		Australia	G & S	2003.2.17	2003.7.28		
		U.S.	G & S	2003.5.6	2004.1.1		
		Jordan	G & S	2004.5.16	2005.8.22		
		India	G & S	2005.6.29	2005.8.1		
		TPP	G & S	2005.7.18	2006.5.28		
		Korea, Republic of	G & S	2005.8.4	2006.3.2		
		Panama	G & S	2006.3.1	2006.7.24		
		Peru	G & S	2008.5.28	2009.8.1		
		China, People's Republic of	G & S	2008.10.23	2009.1.1		
		Bahrain	NA	2008.12.15	.		
		GCC	NA	2008.12.15	.		
		Mexico				2000.6.30	
		Canada				2001.10.21	
		Egypt				2006.10.31	
		Qatar				2004.12.22	
		Kuwait				2005.1.17	

		With	Coverage	Dates Signed	Dates Enforced	Under negotiation	Proposed/ Under Consultation and Study
		Pakistan				2005.8.24	
		ASEAN-EU				2007.5.5	
		Ukraine				2007.5.7	
		Costa Rica				2009.4.22	
		Sri Lanka					2003.8.29
		ASEAN+3					2004.11.29
		ASEAN+6					2005.12.14
		UAE					2005.3.11
		EU					2009.12.22
	Thailand	AFTA	G	1992.1.28	1993.1.1		
		Australia	G & S	2004.7.5	2005.1.1		
		ASEAN-China (G)		2004.11.29	2005.7.1		
		New Zealand	G & S	2005.4.19	2005.7.1		
		ASEAN-Korea (G)	G	2006.8.24	2007.6.1		
		ASEAN-China (S)	S	2007.1.14	2007.7.1		
		Japan	G & S	2007.4.3	2007.11.1		
		ASEAN-Korea (S)	S	2007.11.21	2009.5.1		
		ASEAN-Japan	G	2008.4.14	2008.12.1		
		ASEAN-Australia and New Zealand	NA	2009.2.27	2010.1.1		
		ASEAN-India	NA	2009.8.13	2010.1.1		
		Laos	G		1991.6.20		
		China, People's Republic of	NA	NA	2003.9.30		
		Bahrain				2002.12.29	
		India				2003.11.30	
		BIMSTEC				2004.9.7	
		Peru				2004.1.29	
		U.S.				2004.5.31	
		EFTA				2005.10.15	
		ASEAN-EU				2007.5.5	
		Korea, Republic of					2003.8.23
		Pakistan					2004.3.31
		ASEAN+3					2004.11.29
		ASEAN+6					2005.12.14
		Chile					2006.3.10
		MERCOSUR					2006.3.11
	Vietnam	AFTA	G	1992.1.28	1993.1.1		
		ASEAN-China (G)	G	2004.11.29	2005.7.1		

		With	Coverage	Dates Signed	Dates Enforced	Under negotiation	Proposed/ Under Consultation and Study
		ASEAN-Korea (G)	G	2006.8.24	2007.6.1		
		ASEAN-China (S)	S	2007.1.14	2007.7.1		
		ASEAN-Korea (S)	S	2007.11.21	2009.5.1		
		ASEAN-Japan	G	2008.4.14	2008.12.1		
		Japan	G & S	2008.12.25	2009.10.1		
		ASEAN-Australia and New Zealand	NA	2009.2.27	2010.1.1		
		ASEAN-India	NA	2009.8.13	2010.1.1		
		ASEAN-EU				2007.5.5	
		ASEAN+3					2004.11.29
		ASEAN+6					2005.12.14
Oceania	Australia	SPARTECA	G	1980.7.14	1981.1.1		
		New Zealand	G	1982.12.14	1983.1.1		
		New Zealand	S	1988.8.18	1989.1.1		
		PNG (PATCRA I)	G	1976.11.6	1977.2.1		
		PNG (PATCRA II)	G & S	1991.2.21	1991.9.20		
		Singapore	G & S	2003.2.17	2003.7.28		
		U.S.	G & S	2004.5.18	2005.1.1		
		Chile	G & S	2008.7.30	2009.3.6		
		Thailand	G & S	2004.7.5	2005.1.1		
		New Zealand-ASEAN	G	2009.2.27	2010.1.1		
		UAE				2005.3.16	
		Malaysia				2005.5.19	
		China, People's Republic of				2005.5.23	
		Japan				2007.4.23	
		GCC				2007.7.30	
		Korea, Republic of				2008.10.1	
		Mexico					2006.1.1
		ASEAN+6					2005.12.14
		India					2007.7.31
		Indonesia					2007.7.31
		PACER Plus					2009.8.
		Colombia					2009.12.7
	New Zealand	SPARTECA	G	1980.7.14	1981.1.1		

		With	Coverage	Dates Signed	Dates Enforced	Under negotiation	Proposed/ Under Consultation and Study
		Australia	G	1982.12.14	1983.1.1		
		Australia	S	1988.8.18	1989.1.1		
		Singapore	G & S	2000.11.14	2001.1.1		
		Thailand	G & S	2005.4.19	2005.7.1		
		TPP	G & S	2005.7.18	2006.5.28		
		China, People's Republic of	G & S	2008.4.7	2008.10.1		
		Australia-ASEAN	NA	2009.2.27	2010.1.1		
		Malaysia	NA	2009.10.26			
		Hong Kong, China				2001.6.30	
		GCC				2007.6.30	
		Korea, Republic of				2008.9.29	
		Mexico					2002.10.23
		ASEAN+6					2005.12.14
		India					2007.4.30
		PACER Plus					2009.6.17
	Papua New Guinea (PNG)	SPARTECA	G	1980.7.14	1981.1.1		
		Australia (PATCRA I)	G	1976.11.6	1977.2.1		
		Australia (PATCRA II)	G & S	1991.2.21	1991.9.20		
		MSG	G	1993.7.22	1994.1.1		
		PICTA	G	2001.8.18	2003.4.13		
		Pacific ACP-EC	NA			2004.9.10	
		PACER Plus	NA				2009.6.17
South Asia	Afghanistan	SAFTA	G	2004.1.6.	2006.1.1		
		ECO		2003.7.17	.		
		India		2003.3.6	.		
		Pakistan					2005.1.31
	India	APTA	G	1975.7.31	1976.6.17		
		GSTP	G	1988.4.13	1989.4.19		
		Nepal	NA	1991.12.6	2002.3.6		
		SAPTA	G	1993.4.11	1995.12.7		
		Sri Lanka	G	1998.12.28	2001.12.15		
		Afghanistan	NA	2003.3.6	.		
		SAFTA	G	2004.1.6	2006.1.1		
		MERCOSUR	NA	2004.1.25	2009.6.1		
		Singapore	G & S	2005.6.29	2005.8.1		
		Chile	G	2006.3.8	2007.9.11		
		Buthan	G	2006.7.28	2006.7.29		
		Korea, Republic of	NA	2009.8.7	2010.1.1		
		ASEAN	NA	2009.8.13	2010.1.1		
		Egypt				2002.9.30	

		With	Coverage	Dates Signed	Dates Enforced	Under negotiation	Proposed/ Under Consultation and Study
		Thailand				2003.11.30	
		SACU				2004.9.7	
		BIMSTEC				2004.9.7	
		Mauritius				2005.8.8	
		GCC				2006.3.22	
		Japan				2007.1.31	
		EU				2007.6.28	
		Malaysia				2007.12.31	
		EFTA				2008.1.26	
		EC				2007.6.8	
		China, People's Republic of					2003.6.23
		Colombia					2003.11.30
		Uruguay					2003.11.30
		Venezuela					2003.11.30
		Israel					2004.12.8
		Pakistan					2005.2.
		Indonesia					2005.8.8
		ASEAN+6					2005.12.14
		Russia					2006.2.6
		New Zealand					2007.4.30
		Australia					2007.7.31
		Turkey					2009.9.8
		Canada					2009.1.21
	Jordan	PAFTA	G	1997.2.19	1998.1.1		
		EC	G	1997.11.24	2002.5.1		
		U.S.	G & S	2000.10.24	2001.12.17		
		EFTA	G	2001.6.21	2002.1.1		
		Singapore	G & S	2004.5.16	2005.8.22		
		Canada		2009.6.28			
	Nepal	Indo-Nepal		1991.12.06	2002.3.6		
		SAFTA		2004.1.6	2006.1.1		
						2004.9.7	
							2009.6.29
	Pakistan	PTN	G	1971.12.8	1973.2.11		
		SAPTA	G	1993.4.11	1995.12.7		
		Malaysia	G & S	2007.11.8	2008.1.1		
		Iran	NA	2004.3.4	2006.9.1		
		Mauritius	Pakistan	2007.7.30	2007.11.30		
		Sri Lanka	G	2002.8.1	2005.6.12		
		China, People's Republic of	G	2005.4.5	2007.7.1		
		SAFTA	G	2004.1.6	2006.1.1		
		ECO	G	NA	1992.2.17		
		D-8 PTA		2006.5.13	.		
		TPS-OIC				2004.3.31	
		Turkey				2004.5.25	

		With	Coverage	Dates Signed	Dates Enforced	Under negotiation	Proposed/ Under Consultation and Study
		GCC				2004.8.24	
		Indonesia				2005.11.24	
		MERCOSUR				2005.7.11	
		Bangladesh				2003.11.16	
		Morocco				2004.11.30	
		Singapore				2005.8.24	
		Afghanistan					2005.1.31
		Brunei Darussalam					2007.7.31
		EU					2009.6.17
		Jordan					2006.6.26
		Kazakhstan					2003.11.30
		Nepal					2009.6.29
		Philippines					2004.4.1
		Tajikistan					2004.5.6
		Thailand					2004.3.31
		US					2002.11.30

## Notes:

1. The **dates** are based on ADB's Asia Regional Integration Center (<http://aric.adb.org>), unless stated otherwise.
2. **Coverage** (goods vs. services) is based on WTO's Regional Trade Agreements Information System (<http://rtais.wto.org>). G = goods; S = services.
3. **Data** for under negotiation are based on ADB's Asia Regional Integration Center and national sources, as follows:  
 Australian Department of Foreign Affairs and Trade (<http://www.dfat.gov.au/>)  
 China FTA Network (<http://fta.mofcom.gov.cn/>)  
 Foreign Affairs and International Trade Canada (<http://www.international.gc.ca>)  
 India, Ministry of Commerce and Industry (<http://commerce.nic.in>)  
 Japan Ministry of Foreign Affairs (<http://www.mofa.go.jp>)  
 Korea Ministry of Foreign Affairs and Trade (<http://www.mofat.go.kr>)  
 Singapore FTA Network (<http://www.fta.gov.sg/>)
4. Members of various regional blocks:  
**AFTA** (ASEAN Free Trade Agreement): Brunei Darussalam; Cambodia; Indonesia; Lao People's Democratic Republic; Malaysia; Myanmar; Philippines; Singapore; Thailand; and Vietnam.  
**APTA** (Asia-Pacific Trade Agreement): Bangladesh; India; Laos; China; Korea; and Sri Lanka  
**BIMSTEC** (Bay of Bengal Initiative on Multi-Sectoral Technical and Economic Cooperation): Bhutan; Myanmar; Sri Lanka; Bangladesh; India; Nepal; and Thailand  
**D-8 PTA** (Preferential Tariff Arrangement-Group of Eight Developing Countries): Bangladesh; Malaysia; Pakistan; Egypt; Islamic Republic of Iran Nigeria; and Turkey  
**ECO** (Economic Cooperation Organization): Afghanistan; Azerbaijan; Iran, Islamic Republic of; Republic of Kazakhstan; Kyrgyz Republic; Pakistan; Tajikistan; Turkey; Turkmenistan; and Uzbekistan  
**EFTA** (European Free Trade Association): Iceland; Liechtenstein; Norway; and Switzerland  
**GSTP** (Global System of Trade Preferences among Developing Countries): Algeria; Argentina; Bangladesh; Benin; Bolivarian Republic of Venezuela; Bolivia; Brazil; Cameroon; Chile; Colombia; Cuba; Ecuador; Egypt; Republic of Macedonia; Ghana; Guinea; Guyana; India; Indonesia; Iran; Islamic Republic of; Iraq; Democratic People's Republic of Korea; Korea, Republic of; Libyan Arab Jamahiriya; Malaysia; Mexico; Morocco; Mozambique; Myanmar; Nicaragua; Nigeria; Pakistan; Peru; Philippines; Singapore; Sri Lanka;



- Sudan; Tanzania; Thailand; Trinidad and Tobago; Tunisia; Vietnam; and Zimbabwe
- MERCOSUR** (Southern Common Market): Brazil; Uruguay; Argentina; and Paraguay
- MSG** (Melanesian Spearhead Group): Fiji Islands; Papua New Guinea; Solomon Islands; and Vanuatu
- Pacific ACP-EC** (African, Caribbean and Pacific Group of States - European Community) EPA: There are currently (as of 2010) 79 member countries in ACP groups of countries. The Pacific countries of the ACP (Cook Islands; the Federated States of Micronesia; Fiji; Kiribati; the Republic of Marshall Islands; Nauru; Niue; Palau; Papua New Guinea; Samoa; Solomon Islands; Tonga; Tuvalu, and Vanuatu) agreed with the EC to launch negotiations for an Economic Partnership Agreement.
- PACER** (Pacific Agreement on Closer Economic Relations): Australia; Fiji Island; Maldives; Micronesia, Federated State of; New Zealand; Palau; Samoa; Tonga; Vanuatu; Cook Islands; Kiribati; Marshall Islands; Nauru; Niue; Papua New Guinea; Solomon Islands; and Tuvalu. PACER Plus: All PACER member countries, except Fiji Island and Maldives, launched negotiations for a new regional trade and economic agreement at their fortieth meeting in August 2009.
- PAFTA** (Pan-Arab Free Trade Area): Bahrain; Egypt; Iraq; Jordan; Kuwait; Lebanon; Libyan Jamahiriya; Morocco; Oman; Qatar; Saudi Arabia; Sudan; Syrian Arab Republic of; Tunisia; United Arab Emirates; and Yemen
- PICTA** (Pacific Islands Countries Trade Agreement: Cook Islands; Fiji Islands; Federated States of Micronesia (haven't been in force); Kiribati; Nauru; Niue; Papua New Guinea; Samoa; Solomon Islands; Tonga; Tuvalu (2008); and Vanuatu (2005)
- PTN** (Protocol on Trade Negotiation): Bangladesh; Brazil; Chile; Egypt; Israel; Korea, Republic of; Mexico; Pakistan; Paraguay; Peru; Philippines; Serbia; Tunisia; Turkey; and Uruguay
- SACU** (Southern Africa Customs Union): Botswana; Lesotho; Namibia; South Africa; and Swaziland
- SAFTA** (South Asia Free Trade Area): Bangladesh; India; Sri Lanka; Bhutan; and Maldives
- SAPTA** (South Asian Preferential Trade Agreement): Bangladesh; Bhutan; India; Maldives; Nepal; Pakistan; and Sri Lanka
- SCO** (Shanghai Cooperation Organization): China; Kyrgyz Republic; Tajikistan; Kazakhstan; Russian Federation; and Uzbekistan
- SPARTECA** (South Pacific Regional Trade and Economic Cooperation Agreement): Fiji Islands; Marshall Islands; Nauru, Niue; Papua New Guinea; Solomon Islands; Tuvalu; Cook Islands; Kiribati; Federated States of Micronesia; New Zealand; Palau; Samoa; Tonga; and Vanuatu
- TPP** (Trans-Pacific Strategic Economic Partnership Agreement): Brunei Darussalam; Chile; New Zealand; and Singapore
- TPS-OIC** (Trade Preferential System of the Organization of the Islamic Conference): Bahrain; Cameroon; Guinea; Jordan; Libyan; Arab Jamahiriya; Pakistan; Syrian Arab Republic; Turkey; United Arab Emirates; Bangladesh; Egypt; Islamic Republic of Iran; Lebanon; Senegal; Tunisia; and Uganda



# Appendix II

## Number of FTAs in Asia by Status (1975-January 2010)

YEAR	Proposed	UNDER NEGOTIATION		CONCLUDED		TOTAL
		Framework Agreement Signed/Under Negotiation	Under Negotiation	Signed	In Effect	
1975	0	0	0	1	0	1
1976	0	0	0	0	1	1
1980	0	0	0	1	1	2
1981	0	0	0	0	2	2
1982	0	0	0	1	2	3
1983	0	0	0	1	3	4
1989	1	0	0	1	3	5
1991	1	0	0	2	5	8
1992	1	0	0	6	5	12
1993	1	0	0	5	9	15
1994	1	0	0	9	11	21
1995	1	0	0	16	14	31
1996	1	0	0	19	19	39
1997	2	0	0	21	20	43
1998	2	0	0	20	23	45
1999	4	0	1	20	24	49
2000	3	0	6	20	25	54
2001	2	0	8	19	28	57
2002	8	2	8	20	31	69
2003	18	4	10	27	35	94
2004	33	14	16	29	42	134
2005	46	18	29	29	50	172
2006	52	18	37	25	63	195

YEAR	Proposed	UNDER NEGOTIATION		CONCLUDED		TOTAL
		Framework Agreement Signed/Under Negotiation	Under Negotiation	Signed	In Effect	
2007	49	18	42	28	69	206
2008	46	16	42	27	79	210
2009	49	16	44	27	85	221
2010	49	16	44	24	88	221

### Notes:

1. Proposed - parties are considering a free trade agreement, establishing joint study groups or joint task force , and conducting feasibility studies to determine the desirability of entering into an FTA.
- 2a. Framework Agreement Signed/Under Negotiation - parties initially negotiate the contents of a framework agreement (FA), which serves as a framework for future negotiations.
- 2b. Under Negotiation - parties begin negotiations without a framework agreement (FA).
- 3a. Signed - parties sign the agreement after negotiations have been completed. Some FTAs would require legislative or executive ratification.
- 3b. In Effect - when the provisions of an FTA becomes effective, e.g., when tariff cuts begin.  
As of January 2010

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